

## SEQUENCE LISTING

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<120> COMPOSITIONS AND METHODS FOR THE THERAPY  
 AND DIAGNOSIS OF BREAST CANCER

<130> 210121.419C12

<140> US

<141> 2001-08-07

<160> 340

<170> FastSEQ for Windows Version 4.0

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102000-0044360



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825, 829, 838, 845, 849, 852, 855, 856, 859, 874, 876, 877,  
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 999, 1002, 1005, 1009, 1010, 1033, 1047, 1049, 1055, 1058,  
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 cgataggcgc cggccagcca gcggaacggg tgcccggatg gcgaagcgag ccggagttct 120  
 tcggactgag tatgaatctt gttgtgaaaa tactcgccgc cttcgttcga cgacgtcgcg 180  
 tcgaaatctt cgancctcctt acgatcgaag tcttcgtggg cgacgatcgc gggtcagttcc 240  
 gccccaccga aatcatgggt gagccggatg ctgnccccga agncctcggt tgtn 294

<210> 21  
 <211> 208  
 <212> DNA  
 <213> Homo sapiens

<220>  
 <221> misc\_feature  
 <222> 116, 132, 140, 160, 164, 191, 197, 199  
 <223> n = A,T,C or G

<400> 21  
 ttggtaaagg gcatggacgc agacgcctga cgtttggtcg aaaatctttc attgattcgt 60  
 atcaatgaat agggaaattc ccaaagaggg aatgtcctgt tgctcgccag ttttntgtt 120  
 gttctcatgg anaaggcaan gagctcttca gactattggn attntcggtc ggtcttctgc 180  
 caactagtcg ncttgcnang atcttcat 208

<210> 22  
 <211> 287  
 <212> DNA  
 <213> Homo sapiens

<220>  
 <221> misc\_feature  
 <222> 1, 4, 25, 121, 168, 207, 212  
 <223> n = A,T,C or G

<400> 22  
 nccnttgagc tgagtgattg agatntgtaa tggttgtaag ggtgattcag gcggattagg 60  
 gtggcgggtc acccggcagt gggctctccg acaggccagc aggatttggg gcaggtagcg 120  
 ngtgcgcatc gctcgactat atgctatggc aggcgagccg tggaaggngg atcaggtcac 180  
 ggcgctggag ctttccacgg tccatgnatt gngatggctg ttctaggcgg ctgttgccaa 240  
 gcgtgatggt acgctggctg gagcattgat ttctgggtgcc aaggtgg 287

<210> 23  
 <211> 204  
 <212> DNA  
 <213> Homo sapiens

<220>  
 <221> misc\_feature  
 <222> 40, 121, 131, 162, 184, 197  
 <223> n = A,T,C or G

<400> 23

```
ttgggtaaaag ggagcaagga gaaggcatgg agaggctcan gctggtcctg gcctacgact 60
gggccaaagct gtcgccgggg atggtggaga actgaagcgg gacctcctcg aggtcctccg 120
ncgttacttc nccgtccagg aggaggggtct ttccgtgggc tnggaggagc ggggggagaa 180
gatnctcctc atggtcnaca tccc                                     204
```

<210> 24

<211> 264

<212> DNA

<213> Homo sapiens

<220>

<221> misc\_feature

<222> 171, 206

<223> n = A,T,C or G

<400> 24

```
tggattgggc aggagcgggt agagtggcac cattgagggg atattcaaaa atattatattt 60
gtcctaaatg atagtgtctg agtttttctt tgacctatga gttatattgg agtttatattt 120
ttaactttcc aatcgcatgg acatgttaga cttattttct gttaatgatt nctatttttta 180
ttaaattgga tttgagaaat tggttnttat tataatcaatt tttgggtattt gttgagtttg 240
acattatagc ttagtatgtg acca                                     264
```

<210> 25

<211> 376

<212> DNA

<213> Homo sapiens

<220>

<221> misc\_feature

<222> 103, 111, 192, 196, 199, 220, 224, 230, 251, 268, 283, 317, 352, 370, 374

<223> n = A,T,C or G

<400> 25

```
ttacaacgag gggaaactcc gtctctacaa aaattaaaaa attagccagg tgtgggtggtg 60
tgcaccgca atcccagcta cttggggaggt tgagacacaa gantcaccta natgtgggag 120
gtcaagggtt catgagtcac gattgtgccca ctgcactcca gcctgggtga cagaccgaga 180
ccctgcctca anaganaang aataggaagt tcagaaatcn tggntgtggn gccagcaat 240
ctgcatctat ncaacccttg caggcaangc tgatgcagcc tangttcaag agctgctgtt 300
tctggaggca gcagttnggg cttccatcca gtatcacggc cacactcgca cnagccatct 360
gtcctccgtn tgnac                                     376
```

<210> 26

<211> 372

<212> DNA

<213> Homo sapiens

<220>

<221> misc\_feature

<222> 231, 312, 340

<223> n = A,T,C or G

<400> 26

```

ttacaacgag gggaaactcc gtctctacaa aaattaaaaa attagccagg tgtggtggtg 60
tgcacctgta atcccagcta cttgggcggc tgagacacaa gaaccaccta aatgtgggag 120
ggccaagggt gcatgagtca tgatcgcgcc actgcactcc agcctgggtg acagactgag 180
accctgcctc aaaagaaaaa gaataggaag ttcagaaacc ctgggtgtgg ngcccagcaa 240
tctgcattta aacaatccct gcaggcaatg ctgatgcagc ctaagttcaa gagctgctgt 300
tctggaggca gnagtaaggg cttccatcca gcatcacggn caaactgca aaagcacctg 360
tcctcgttgg ta 372

```

```

<210> 27
<211> 477
<212> DNA
<213> Homo sapiens

```

```

<400> 27
ttctgtccac atctacaagt tttatttatt ttgtgggttt tcagggtgac taagtttttc 60
cctacattga aaagagaagt tgctaaaagg tgcacaggaa atcatttttt taagtgaata 120
tgataatatg ggtccgtgct taatacaact gagacatatt tgttctctgt ttttttagag 180
tcacctctta agtccaatc ccacaatggt gaaaaaaaaa tagaaagtat ttgttctacc 240
tttaaggaga ctgcagggat tctccttgaa aacggagat ggaatcaatc ttaaataaat 300
atgaaattgg ttggtcttct gggataagaa attcccaact cagtgtgctg aaattcacct 360
gacttttttt gggaaaaaat agtcgaaaaat gtcaatttgg tccataaaat acatgttact 420
attaaaagat atttaaagac aaattctttc agagctctaa gattggtgtg gacagaa 477

```

```

<210> 28
<211> 438
<212> DNA
<213> Homo sapiens

```

```

<220>
<221> misc_feature
<222> 4, 16, 30, 255, 413
<223> n = A,T,C or G

```

```

<400> 28
tctncaacct cttgantgtc aaaaaccttn taggctatct ctaaaagctg actggtattc 60
attccagcaa aatccctcta gtttttgag ttctctttta ctatctgggg ctgcctgagc 120
cacaaatgcc aaattaagag catggctatt ttccgggggt gacagggtcaa aaggggtgta 180
aatccgataa gcctcctgga ggtgctctaa aaacactcct ggtgactcat catgcccctg 240
gacgacttca atcgnttag acaagtttat aggtttctgg gcagctccct gaataccac 300
gaggagatac cgggtgaaat cgtcaaaaagt tctccctcca cttgagaaat ttgggtccca 360
attaggtccc aattgggtct ctaatcacta ttccctctagc ttccctcctcc ggnctattgg 420
ttgatgtgag gttgaaga 438

```

```

<210> 29
<211> 620
<212> DNA
<213> Homo sapiens

```

```

<220>
<221> misc_feature
<222> 391, 481, 483, 490, 497, 510, 527, 532, 540, 545, 593, 612
<223> n = A,T,C or G

```

```

<400> 29

```

```

aagagggtac cagccccaag ccttgacaac ttccataggg tgtcaagcct gtgggtgcac 60
agaagtcaaa aattgagttt tgggatcctc agcctagatt tcagaggata taaagaaaca 120
cctaacacct agatattcag acaaaaagttt actacaggga tgaagctttc acggaaaacc 180
tctactagga aagtacagaa gagaaatgtg gggttgaggc ccccaaacag aatccccctct 240
agaacactgc ctaatgaaac tgtgagaaga tggccactgt catccagaca ccagaatgat 300
agaccaccca aaaacttatg ccatattgcc tataaaacct acagacactc aatgccagcc 360
ccatgaaaaa aaaactgaga agaagactgt nccctacaat gccaccggag cagaactgcc 420
ccaggccatg gaagcacagc tcttatatca atgtgacctg gatgttgaga catggaatcc 480
nangaaatcn ttttaanact tccacggttn aatgactgcc ctattanatt cngaacttan 540
atccnggcct gtgacctctt tgctttggcc attccccctt tttggaatgg ctnttttttt 600
cccatgcctg tncctctta                                     620

```

```

<210> 30
<211> 100
<212> DNA
<213> Homo sapiens

```

```

<400> 30
ttacaacgag ggggtcaatg tcataaatgt cacaataaaa caatctcttc tttttttttt 60
tttttttttt tttttttttt tttttttttt tttttttttt                                     100

```

```

<210> 31
<211> 762
<212> DNA
<213> Homo sapiens

```

```

<220>
<221> misc_feature
<222> 626, 652, 662, 715, 736
<223> n = A,T,C or G

```

```

<400> 31
tagtctatgc gccggacaga gcagaattaa attggaagtt gccctccgga ctttctaccc 60
acactcttcc tgaaaagaga aagaaaagag gcaggaaaga ggtaggatt tcattttcaa 120
gagtcagcta attaggagag cagagtttag acagcagtag gcaccccatg atacaaacca 180
tggacaaagt ccctgttttag taactgccag acatgatcct gctcagggtt tgaaatctct 240
ctgccataaa aagatggaga gcaggagtgc catccacatc aacacgtgtc caagaaagag 300
tctcagggag acaaggggat caaaaaacaa gattcttaat gggaaggaaa tcaaaccaaa 360
aaattagatt tttctctaca tatatataat atacagatat ttaacacatt attccagagg 420
tggctccagt ctttggggct tgagagatgg tgaaaacttt tgttccacat taacttctgc 480
tctcaaattc tgaagtatat cagaatggga caggcaatgt tttgctccac actggggcac 540
agacccaaat ggttctgtgc ccgaagaaga gaagcccgaag agacatgaag gatgcttaag 600
gggggttggg aaagccaaat tgggtantatc ttttctctct gcctgtgttc cngaagtctc 660
cnctgaagga attcttaaaa ccctttgtga ggaaatgccc cttaccatg acaantggtc 720
ccattgcttt tagggngatg gaaacaccaa gggttttgat cc                                     762

```

```

<210> 32
<211> 276
<212> DNA
<213> Homo sapiens

```

```

<400> 32
tagtctatgc gtgtattaac ctccccctcc tcagtaacaa ccaaagaggc aggagctggt 60
attaccaacc ccattttaca gatgcatcaa taatgacaga gaagtgaagt gacttgcgca 120

```

<400> 35							
tagtagttgc	catcccatat	tacagaaggc	tctgtataca	tgacttattt	ggaagtgatc		60
tgttttctct	ccaaacccat	ttatcgtaat	ttcaccagtc	ttggatcaat	cttggtttcc		120
actgatacca	tgaacctac	ttggagcaga	cattgcacag	ttttctgtgg	taaaaactaa		180
aggtttattt	gctaaagctgt	catcttatgc	ttagtatttt	ttttttacag	tggggaattg		240
ctgagattac	attttgttat	tcattagata	ctttgggata	acttgacact	gtcttctttt		300
tttcgctttt	aattgctatc	atcatgcttt	tgaacaaga	acacattagt	cctcaagtat		360
tacataagct	tgcttgttac	gcctggtggt	ttaaaggact	atctttggcc	tcaggttcac		420
aagaatgggc	aaagtgtttc	cttatgttct	gtagttctca	ataaaaagatt	gccaggggccc		480
gggtactgtg	gctcgcactg	taatcccagc	acttttggaa	gctgaggctg	gcggatcatg		540
ttagggcagq	tgttcgaaac	cagcctgggc	aactacta				578

<210> 36  
 <211> 583  
 <212> DNA  
 <213> Homo sapiens

<400> 36  
 tagtagttgc ctgtaatccc agcaactcag gaggctgggg caggagaatc agttgaacct 60  
 gggaggcaga agttgtaatt agcaaagatc gcaccattgc acttcagcct gggcaacaag 120  
 agtgagattc catctcaaaa acaaaaaaaaaa gaaaaagaaa agaaaaggaa aaaacgtata 180  
 aaccagcca aaacaaaatg atcattcttt taataagcaa gactaattta atgtgtttat 240  
 ttaatcaaag cagttgaatc ttctgagtta ttggtgaaaa taccatgta gttaatntag 300  
 ggttcttact tgggtgaacg ttgatgttc acagggtata aaatgggtta caaggaaaaat 360  
 gatgcataaa gaatcttata aactactaaa aataaataaa atataaatgg atagggtgcta 420  
 tggatggagt ttttgtgtaa tttaaaatct tgaagtcatt ttggatgctc attggttgtc 480  
 tggtaatctc cattaggaaa aggttatgat atggggaaac tgtttctgga aattgcggaa 540  
 tgtttctcat ctgtaaaatg ctagtatctc agggcaacta cta 583

<210> 37  
 <211> 716  
 <212> DNA  
 <213> Homo sapiens

<220>  
 <221> misc\_feature  
 <222> 15, 669, 673, 678, 686, 704  
 <223> n = A,T,C or G

<400> 37  
 gatctactag tcatntggat tctatccatg gcagctaagc ctttctgaat ggattctact 60  
 gctttcttgt tctttaatcc agacccttat atatgtttat gttcacaggc agggcaatgt 120  
 ttagtgaaaa caattctaaa ttttttatTT tgcatTTTca tgctaatttc cgtcacactc 180  
 cagcaggctt cctgggagaa taaggagaaa tacagctaaa gacattgtcc ctgcttactt 240  
 acagcctaatt ggtatgcaaa accacttcaa taaagtaaca ggaaaagtac taaccaggta 300  
 gaatggacca aaactgatat agaaaaatca gaggaagaga ggaacaaata tttactgagt 360  
 cctagaatgt acaaggcttt ttaattacat attttatgta aggcctgcaa aaaacagggtg 420  
 agtaatcaac atttgtccca ttttacatat aaggaaactg aagcttaaat tgaataattt 480  
 aatgcataga ttttatagtt agaccatggt caggcccta tgttatactt actagctgta 540  
 tgaatatgag aaaataattt tgttatTTTc ttggcatcag tattttcatc tgcaaaaataa 600  
 agctaaagtt atttagcaaa cagtcagcat agtgcctgat acatagtagg tgctccaaac 660  
 atgattacnc tantattingg tattanaaaa atccaatata ggcntggata aaaccg 716

<210> 38  
 <211> 688  
 <212> DNA  
 <213> Homo sapiens

<220>  
 <221> misc\_feature  
 <222> 260  
 <223> n = A,T,C or G

<400> 38  
 ttctgtccac atatcatccc actttaattg ttaatcagca aaactttcaa tgaaaaatca 60  
 tccattttta ccaggatcac accaggaaac tgaagggtgta ttttttttta ccttaaaaaa 120







<400> 44  
 ggcttagtag ttgccaggca aaatarcgtt gattctcctc aggagccacc cccaacaccc 60  
 ctgtttgctt ctagacctat acctagacta aagtcccagc agacccctag aggtgaggtt 120  
 cagagtgacc cttgaggaga tgtgctacac tagaaaagaa ctgcttgagt tttctaattt 180  
 atataagcag aaatctggag aagagtcata ggaatggata ttaaggggtg gagataatgg 240  
 cggaaggaat atagagttgg atcaggctgg acttattgat ttgaaccac taagtagaga 300  
 ttctgctttt gatgttcag ctcagggagt taaaaaagg tttaatgggt ctaatagttt 360  
 atttgcttgg ttagctgaaa tatggataaa agatggccca ctgtgagcaa gctggàaatg 420  
 cctgatctct ctcagtttaa tgtagaggaa gggatccaaa agtttaggga ganttgatg 480  
 ctggraktgg attggtcact ttgrgacctt cccwtcccag ctgggagggg ccagaagata 540  
 cacccttgac caacgctttg cgaaatggat ttgtgatggc ggcaactact aa 592

<210> 45  
 <211> 567  
 <212> DNA  
 <213> Homo sapiens

<220>  
 <221> misc\_feature  
 <222> 522, 561, 566  
 <223> n = A,T,C or G

<400> 45  
 ggcttagtag ttgccattgc gagtgccttc tcaacgagcg ttgaacatgg cggattgtct 60  
 agattcaacg gatttgagtt ttaccagcaa agcgaaccaa gcgcggccca gagaattatg 120  
 gggttggttg ctttgaaaag atggaaatcc tgtaggccta gtcagaaaag ctttcttgca 180  
 gaacagttgg ttctcgggcg aacgctcatc aagatgcccc ttggaaaggc tagcgtgtat 240  
 ttgggagagc ctgatagcgt gtcttctgat gatgtttgtg cttggacagt gacaaaagat 300  
 atgcaaagca agtccgaact agacgtcaag ctctgtgagc aaattattgt agactcctac 360  
 ttatactgtg aggaatgata gccaaaggtg gggactttta gactaagggt gtttgtactt 420  
 gcgcgatga tcccaggcag aaagamctga tcgctagttt tatacgggca actactaagc 480  
 cgaattccag cacactggcg gccgttacta attggatccg anctcgggtac cagcttgatg 540  
 catascctga gttwtctata ntgtcnc 567

<210> 46  
 <211> 908  
 <212> DNA  
 <213> Homo sapiens

<220>  
 <221> misc\_feature  
 <222> 21, 23, 24, 27, 29, 34  
 <223> n = A,T,C or G

<400> 46  
 gagcgaaaga ccgagggcag ngnntangng cgangaagcg gagagggcca aaaagcaacc 60  
 gctttccccg gggggtgccg attcatthaag gcaggtggag gacaggtttc ccgatggaag 120  
 gcgcgagggg cgcaagcaat taatgtgagt aggccattca ttagcaccgc ggcttaacat 180  
 ttaagcttcg gggttggtat tgggtgggaat tgtgagcgga taacaatttc acacaggaaa 240  
 cagctatgac catgattacg ccaagctatt taggtgacat tatagaataa ctcaagttat 300  
 gcatcaagct tggtagccag ttcggatcca ctagtaacgg ccgccagtgt gtggaattcg 360  
 gcttagtagt tgccgacctt ggagtgctac ctaggctaga atacctgagy tcctccctag 420  
 cctcactcac attaaattgt atcttttcta cattagatgt cctcagcgcc ttatttctgc 480  
 tggacwatcg ataaattaat cctgatagga tgatagcagc agattaatta ctgagagtat 540

```

gttaatgtgt catccctcct atataacgta tttgcatttt aatggagcaa ttctggagat 600
aatccctgaa ggcaaaggaa tgaatcttga gggtgagaaa gccagaatca gtgtccagct 660
gcagttgtgg gagaagggtga tattatgtat gtctcagaag tgacaccata tgggcaacta 720
ctaagcccga attccagcac actggcgggc gttactaatg gatccgagct cggtagcaag 780
cttgatgcat agcttgagta tctatagtgt cactaaatag cctggcggtta tcatgggtcat 840
agctgtttcc tgtgtgaaat tgttatccgc tcccaattcc ccccaccata cgagccggaa 900
cataaagt                                         908

```

```

<210> 47
<211> 480
<212> DNA
<213> Homo sapiens

```

```

<220>
<221> misc_feature
<222> 408, 461
<223> n = A,T,C or G

```

```

<400> 47
tgccaacaag gaaagtttta aatttcccct tgaggattct tggatgatcat caaattcagt 60
ggtttttaag gttgttttct gtcaaataac tctaacttta agccaaacag tatatggaag 120
cacagataka atattacaca gataaaagag gagttgatct aaagtaraga tagttggggg 180
ctttaatttc tggaacctag gtctcccat cttcttctgt gctgaggaac ttcttgggaag 240
cggggattct aaagtctttt ggaagacagt ttgaaaacca ccatgttggt ctcagtacct 300
ttatttttaa aaagtaggtg aacattttga gagagaaaag ggcttggttg agatgaagtc 360
ccccccccc cttttttttt ttttagctga aatagatacc ctatgttnaa rgaarggatt 420
attattttacc atgccaytar scacatgctc tttgatgggc nyctccstac cctccttaag 480

```

```

<210> 48
<211> 591
<212> DNA
<213> Homo sapiens

```

```

<400> 48
aagaggggtac cgagtggaaat ttccgcttca ctagtctggg gtgggctagtc ggtttcgtgg 60
tggccaacat tacgaacttc caactcaacc gttcttggac gttcaagcgg gtagtaccggc 120
gaggatgggtg gcgtgaattc tggcctttct ttgccgtggg atcggttagcc gccatcatcg 180
gtatgtttat caagatcttc ttactaacc cgacctctcc gatttacctg cccgagccgt 240
ggtttaacga ggggaggggg atccagtcac gcgagtactg gtcccagatc ttcgccatcg 300
tcgtgacaat gcctatcaac ttcgtcgtca ataagttgtg gaccttccga acggtgaagc 360
actccgaaaa cgtccgggtg ctgctgtgcg gtgactccca aaatcttgat aacaacaagg 420
taaccgaatc gcgctaagga accccggcat ctcggttact ctgcatatgc gtacccttta 480
agccgaattc cagcacactg gcggccgtta ctaattggat ccgaactccg taaccaagcc 540
tgatgcgtaa cttgagttat tctatagtgt ccctaaaata acctggcggt a 591

```

```

<210> 49
<211> 454
<212> DNA
<213> Homo sapiens

```

```

<400> 49
aagaggggtac ctgccttgaa atttaaatgt ctaaggaaar tgggagatga ttaagagttg 60
gtgtggcyta gtcacaccaa aatgtattta ttacatcctg ctcccttcta gttgacagga 120

```

```

aagaaagctg ctgtggggaa aggagggata aatactgaag ggatttacta aacaaatgtc 180
catcacagag ttttcctttt tttttttttg agacagagtc ttgctctgtc acccaggctg 240
gaatgaagwg gtatgatctc agttgaatgc aacctctacc tcctaggttc aagcgattct 300
catgcctcag cctcctgagc agctgggact ataggcgcat gctaccatgc caggctaatt 360
tttatatttt tattagagac ggggtgttgc catgttggcc aggcagggtct cgaactcctg 420
ggcctcagat gatctgcccc accgtaccct ctta 454

```

```

<210> 50
<211> 463
<212> DNA
<213> Homo sapiens

```

```

<400> 50
aagagggtac caaaaaaaaaa aaaaaggaaa aaaagaaaaa caacttgtat aaggctttct 60
gctgcataca gctttttttt tttaaataaa tggtgccaac aaatgtttt gcattcacac 120
caattgctgg ttttgaaatc gtactcttca aaggatattg tgcagatcaa tccaatagt 180
atgccccgta ggttttgtgg actgcccacg ttgtctacct tctcatgtag gagccattga 240
gagactgttt ggacatgcct gtgttcatgt agccgtgatg tccggggggc gtgtacatca 300
tgttaccgtg ggggtggggtc tgcattggct gctgggcata tggctgggtg cccatcatgc 360
ccatctgcat ctgcataggg tattggggcg ttgatccat atagccatga ttgctgtggt 420
agccactgtt catcattggc tgggacatgc tgttaccctc tta 463

```

```

<210> 51
<211> 399
<212> DNA
<213> Homo sapiens

```

```

<400> 51
cttcaacctc ccaaagtgtc gggattacag gactgagcca ccacgctcag cctaagcctc 60
tttttacta ccctctaagc gatctaccac agtgatgagg ggctaaagag cagtgcattt 120
tgattacaat aatggaactt agatttatta attaacaatt tttccttagc atgttggttc 180
cataattatt aagagtatgg acttacttag aaatgagctt tcattttaag aatttcatct 240
ttgaccttct ctattagtct gagcagtatg acactatacg tattttattt aactaaccta 300
ccttgagcta ttacttttta aaaggctata tacatgaatg tgtattgtca actgtaaagc 360
cccacagtat ttaattatat catgatgtct ttgagggtg 399

```

```

<210> 52
<211> 392
<212> DNA
<213> Homo sapiens

```

```

<400> 52
cttcaacctc aatcaacctt ggtaattgat aaaatcatca ctttaactttc tgatataatg 60
gcaataatta tctgagaaaa aaaagtgggtg aaagattaaa cttgcatttc tctcagaatc 120
ttgaaggata tttgaataat tcaaaagcgg aatcagtagt atcagccgaa gaaactcact 180
tagctagaac gttggaccca tggatctaag tccctgccct tccactaacc agctgattgg 240
ttttgtgtaa acctcctaca cgcttgggct tggtcgcctc atttgtcaaa gtaaaggctg 300
aaataggaag ataatgaacc gtgtcttttt ggtctctttt ccatccatta ctctgatttt 360
acaaagaggc ctgtattccc ctggtgaggt tg 392

```

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<210> 53
<211> 179
<212> DNA
<213> Homo sapiens

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<220>  
 <221> misc\_feature  
 <222> 135, 143, 179  
 <223> n = A,T,C or G

<400> 53  
 ttcgggtgat gcctcctcag gctacagtga agactggatt acagaaaggt gccagcgaga 60  
 tttcagattc ctgtaaacct ctaaagaaaa ggagtcgctc ctcaactgat gtagaaatga 120  
 ctagttcagc atacngagac acntctgact ccgattctag aggactgagt gacctgcan 179

<210> 54  
 <211> 112  
 <212> DNA  
 <213> Homo sapiens

<220>  
 <221> misc\_feature  
 <222> 31, 49, 54, 55, 75, 91, 107  
 <223> n = A,T,C or G

<400> 54  
 ttcgggtgat gcctcctcag gctacatcat natagaagca aagtagaana atcnngtttg 60  
 tgcattttcc cacanacaaa attcaaata ntggaagaaa ttggganagt at 112

<210> 55  
 <211> 225  
 <212> DNA  
 <213> Homo sapiens

<400> 55  
 tgagcttccg cttctgacaa ctcaatagat aatcaaagga caactttaac agggattcac 60  
 aaaggagtat atccaaatgc caataaacat ataaaaagga attcagcttc atcatcatca 120  
 gaagwatgca aattaaaacc ataataagaa accactatgt ccactagaa tagataaaat 180  
 cttaaaagac tggtaaaacc aagtgttggg aaggcaagag gagca 225

<210> 56  
 <211> 175  
 <212> DNA  
 <213> Homo sapiens

<400> 56  
 gctcctcttg ccttaccac acattctcaa aaacctgtta gctcctaag cattctcctg 60  
 ttagtattgg gattttacc ctgtcctata aagatgttat gtacaaaaa tgaagtggag 120  
 ggccataccc tgaggaggagg gagggatctc tagtgttgtc agaagcggaa gctca 175

<210> 57  
 <211> 223  
 <212> DNA  
 <213> Homo sapiens

<400> 57  
 agccatttac caccatgga tgaatggatt ttgtaattct agctgttgta tttgtgta 60  
 ttgttaattt tgtgtgtttt ctgtgaaaca catatattgg atatggagg taaaggagtg 120

TC2000-004766



<400> 62  
agaggggtaca tatgcaacag tatataaagg aagaagtgca ctgagaggaa cttcatcaag 60  
gccatttaat caataagtga tagagtcaag gctcaaccca ggtgtgacgg attccagggtc 120  
ccaagctcct tactggtacc ctctt 145

<210> 63  
<211> 297  
<212> DNA  
<213> Homo sapiens

<400> 63  
tgcactgaga ggaattcaaa gggtttatgc caaagaacaa accagtcctc tgcagcctaa 60  
ctcatttggt tttgggctgc gaagccatgt agagggcgat caggcagtag atggtcctc 120  
ccacagtcag cgccatggtg gtccggtaaa gcatttggtc aggcaggcct cgtttcagggt 180  
agacgggcac acatcagctt tctggaaaaa cttttgtagc tctggagctt tgtttttccc 240  
agcataatca tacactgtgg aatcggaggt cagtttagtt ggtaaggcaa gaggagc 297

<210> 64  
<211> 300  
<212> DNA  
<213> Homo sapiens

<400> 64  
gcactgagag gaacttccaa tactatgttg aataggagtg gtgagagagg gcatccttgt 60  
cttggtgccg ttttcaaagg gaatgcttcc agcttttgcc cattcagtat aatattaaag 120  
aatgttttac cattttctgt cttgcctgtt tttctgtgtt tttgttggtc tcttcattct 180  
ccatttttag gcctttacat gttaggaata tatttctttt aatgatactt caccttttgg 240  
atcttttgtg agactctact catagtgtga taagcactgg gtttgtaagg caagaggagc 300

<210> 65  
<211> 203  
<212> DNA  
<213> Homo sapiens

<400> 65  
gctcctcttg ccttaccacac tcacccagta tgtcagcaat tttatcrgct ttacctacga 60  
aacagcctgt atccaaacac ttaacacact cacctgaaaa gttcaggcaa caatcgctt 120  
ctcatgggtc tctctgctcc agttctgaac ctttctcttt tcttagaaca tgcatttarg 180  
tcgatagaag ttctctctcag tgc 203

<210> 66  
<211> 344  
<212> DNA  
<213> Homo sapiens

<400> 66  
tacgggggacc cctgcattga gaaagcgaga ctcaactctga agctgaaatg ctgttgccct 60  
tgcagtgtctg gtagcaggag ttctgtgctt tgtgggctaa ggctcctgga tgaccctga 120  
catggagaag gcagagttgt gtgccccttc tcatggcctc gtcaaggcat catggactgc 180  
cacacacaaa atgccgtttt tattaacgac atgaaattga aggagagaac acaattcact 240  
gatgtggctc gtaacatgg atatgggtcac atacagaggt gtgattatgt aaagggtta 300  
tccaccacc tcatgtggaa actagcctca atgcaggggt ccca 344



<210> 67  
 <211> 157  
 <212> DNA  
 <213> Homo sapiens

<400> 67  
 gcactgagag gaacttcgta gggagggttga actggctgct gaggaggggg aacaacaggg 60  
 taaccagact gatagccatt ggatggataa tatggtggtt gaggagggac actacttata 120  
 gcagaggggtt gtgtatagcc tgaggaggca tcacccg 157

<210> 68  
 <211> 137  
 <212> DNA  
 <213> Homo sapiens

<400> 68  
 gcactgagag gaacttctag aaagtgaaag tctagacata aaataaaata aaaattttaa 60  
 actcaggaga gacagcccag cacggtggct cacgcctgta atcccagaac tttgggagcc 120  
 tgaggaggca tcacccg 137

<210> 69  
 <211> 137  
 <212> DNA  
 <213> Homo sapiens

<400> 69  
 cggggtgatgc ctcttcaggc tgtatatttga agactatcga ctggacttct tatcaactga 60  
 agaatccgtt aaaaatacca gttgtattat ttctacctgt caaaatccat ttcaaagtgt 120  
 gaagttcctc tcagtgc 137

<210> 70  
 <211> 220  
 <212> DNA  
 <213> Homo sapiens

<220>  
 <221> misc\_feature  
 <222> 89, 112, 129, 171, 172  
 <223> n = A,T,C or G

<400> 70  
 agcatgttga gcccagacac gcaatctgaa tgagtgtgca cctcaagtaa atgtctacac 60  
 gctgcctggt ctgacatggc acaccatcnc gtggagggca casctctgct cngcctacwa 120  
 cgagggcant ctcatwgaca ggttccaccc accaaactgc aagagggtca nnaagtactr 180  
 ccaggggtmya sggacmasgg tgggaytyca ycacwcatct 220

<210> 71  
 <211> 353  
 <212> DNA  
 <213> Homo sapiens

<220>  
 <221> misc\_feature

<222> 66, 160, 204, 246, 267, 334, 339, 342

<223> n = A,T,C or G

<400> 71

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cgttagggtc tctatccact gctaaacccat acacctgggt aaacagggac catttaacat 60
tcccanctaa atatgccaaag tgacttcaca tgtttatctt aaagatgtcc aaaacgcaac 120
tgattttctc ccctaaacct gtgatgggtg gatgattaan cctgagtggc ctacagcaag 180
ttaagtgcaa ggtgctaaat gaangtgacc tgagatacag catctacaag gcagtacctc 240
tcaacncagg gcaactttgc ttctcanagg gcatttagca gtgtctgaag taatttctgt 300
attacaactc acggggcggg ggggtgaatat ctantggana gnagacccta acg 353
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<210> 72

<211> 343

<212> DNA

<213> Homo sapiens

<400> 72

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gcactgagag gaacttccaa tacyatkac agagtgaaca rgcarccyac agaacaggag 60
aaaatgttyg caatctctcc atctgacaaa aggctaatat ccagawtcta awaggaaactt 120
aaacaaattt atgagaaaag aacaracaac ctcaawcaaaa agtgggtgaa ggawatgcts 180
aaargaagac atytattcag ccagtaaaca yatgaaaaaa aggctcatsa tcaactgawca 240
ttagagaaaat gcaaatcaaa accacaatga gataccatct yayrccagtt agaayggtga 300
tcattaaaar stcaggaaac aacagatgct ggacaagggt tca 343
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<210> 73

<211> 321

<212> DNA

<213> Homo sapiens

<220>

<221> misc\_feature

<222> 288

<223> n = A,T,C or G

<400> 73

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gcactgagag gaacttcaga gagagagaga gagttccacc ctgtacttgg ggagagaaac 60
agaaggtgag aaagtctttg gttctgaagc agcttctaag atcttttcat ttgcttcatt 120
tcaaagttcc catgctgcc aagtgccatc ctttggggta ctgttttctg agctccagtg 180
ataactcatt tatacaaggg agatacccag aaaaaaagtg agcaaatctt aaaaagggtg 240
cttgagttca gccttaaata ccatcttgaa atgacacaga gaaagaanga tgttgggtgg 300
gagtggatag agaccctaac g 321
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<210> 74

<211> 321

<212> DNA

<213> Homo sapiens

<400> 74

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gcactgagag gaacttcaga gagagagaga gagttccacc ctgtacttgg ggagagaaac 60
agaaggtgag aaagtctttg gttctgaagc agcttctaag atcttttcat ttgcttcatt 120
tcaaagttcc catgctgcc aagtgccatc ctttggggta ctgttttctg agctccagtg 180
ataactcatt tatacaaggg agatacccag aaaaaaagtg agcaaatctt aaaaagggtg 240
cttgagttca gycttaaata ccatcttgaa atgamacaga gaaagaagga tgttgggtgg 300
gagtggatag agaccctaac g 321
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<210> 75  
 <211> 317  
 <212> DNA  
 <213> Homo sapiens

<400> 75  
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 aactcagttt ctcagttcca atcctgattc aggtgtttac cagctacaca accttaagca 120  
 agtcagataa ccttagcttc ctcatatgca aaatgagaat gaaaagtact catcgctgaa 180  
 ttgttttgag gattagaaaa acatctggca tgcagtagaa attcaattag tattcatttt 240  
 cattcttcta aattaaacaa ataggatttt tagtggtgga acttcagaca ccagaaatgg 300  
 gagtgatag agaccct 317

<210> 76  
 <211> 244  
 <212> DNA  
 <213> Homo sapiens

<400> 76  
 cgttagggtc tctatccact ccactactg atcaaactct atttatttaa ttatTTTTat 60  
 catactttta gttctgggat acacgtgcag catgcgaggg tttgttgcat aggtatacac 120  
 ttgccatggt gggtttgctgc acccatcagt ccatcatcta cattaggtat ttctccta 180  
 gctatccctc ccctagcccc ttacaccccc aacaggctct agtgtgtgaa gttcctctca 240  
 gtgc 244

<210> 77  
 <211> 254  
 <212> DNA  
 <213> Homo sapiens

<400> 77  
 cgttagggtc tctatccact gaaatctgaa gcacaggagg aagagaagca gtyctagtga 60  
 gatggcaagt tcwtttacca cactctttta catttygttt agttttaacc tttatttatg 120  
 gataataaag gtttaatta ataattgatt attttaaggc attcccraat ttgcataatt 180  
 ctcccttttg agataccctt ttatctccag tgcaagtctg gatcaaagtg atasamagaa 240  
 gttcctctca gtgc 254

<210> 78  
 <211> 355  
 <212> DNA  
 <213> Homo sapiens

<220>  
 <221> misc\_feature  
 <222> 69, 87, 186, 192, 220, 227, 251, 278, 339, 346, 350  
 <223> n = A,T,C or G

<400> 78  
 ttcgatacag gcaaacatga actgcaggag ggtggtgacg atcatgatgt tgccgatggg 60  
 ccgatggnc acgaagacgc actgganac gtgcttacgt ccttttgctc tgttgatggc 120  
 cctgagggga cgcaggaccc ttatgacctc cagaatcttc acaacgggag atggcactgg 180  
 attgantccc antgacacca gagacacccc aaccaccagn atatcantat attgatgtag 240  
 ttctgtaga nggccccctt gtggaggaaa gctccatnag ttggtcatct tcaacaggat 300

ctcaacagtt tccgatggct gtgatgggca tagtcatant taacntgtn tcgaa 355

<210> 79

<211> 406

<212> DNA

<213> Homo sapiens

<400> 79

taagagggtta ccagcagaaa ggtagtagtc atcagatagc atcttatacg agtaatatgc 60  
ctgctatttg aagtgttaatt gagaaggaaa attttagcgt gctcactgac ctgcctgtag 120  
ccccagtgc agctaggatg tgcattctcc agccatcaag agactgagtc aagttgttcc 180  
ttaagtcaga acagcagact cagctctgac attctgattc gaatgacact gttcaggaat 240  
cggaatcctg tcgattagac tggacagctt gtggcaagtg aatttgctg taacaagcca 300  
gattttttta aatttatatt gtaaataatg tgtgtgtgtg tgtgtgtata tatatatata 360  
tgtacagtta tctaagttaa tttaaaagtt gtttggtacc ctctta 406

<210> 80

<211> 327

<212> DNA

<213> Homo sapiens

<400> 80

tttttttttt tttactcggc tcagtctaatt ccttttttga gtcactcata ggccagactt 60  
agggctagga tgatgattaa taagagggat gacataacta ttagtggcag gttagtgtgt 120  
tgtagggtc atggtagggg taaaaggagg gcaatttcta gatcaaataa taagaaggta 180  
atagctacta agaagaattt tatggagaaa gggacgcggg cgggggatat agggtcgaag 240  
ccgcactcgt aaggggtgga tttttctatg tagccgttga gttgtggtag tcaaaatgta 300  
ataattatta gtagtaagcc taggaga 327

<210> 81

<211> 318

<212> DNA

<213> Homo sapiens

<400> 81

tagtctatgc ggttgattcg gcaatccatt atttgctgga ttttgtcatg tgttttgcc 60  
attgcattca taatttatta tgcatttatg cttgtatctc ctaagtcag gtatataatc 120  
catgcttttt atgttttgtc tgacataaac tcttatcaga gccctttgca cacagggtt 180  
caataaatat taacacagtc tacatttatt tggatgaatat tgcataatct ctgtactgaa 240  
agcacattaa gtaacaaagg caagtggagaa gaatgaaaag cactactcac aacagttatc 300  
atgattgcgc atagacta 318

<210> 82

<211> 338

<212> DNA

<213> Homo sapiens

<400> 82

tcttcaacct ctactccac taatagcttt ttgatgactt ctagcaagcc tcgctaacct 60  
cgcttacct cccactatta acctactggg agaactctct gtgctagtaa ccacgttctc 120  
ctgatcaaat atcactctcc tacttacagg actcaacata ctagtacag ccctatactc 180  
cctctacata ttaccacaa cacaatgggg ctactcacc caccacatta acaacataaa 240  
accctcattc acacgagaaa acacctcat gttcatcac ctatcccca ttctcctcct 300  
atccctcaac cccgacatca ttaccgggtt ttctctct 338

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<210> 83  
 <211> 111  
 <212> DNA  
 <213> Homo sapiens

<400> 83  
 agccattttac cacccatcca caaaaaaaaaa aaaaaaaaaag aaaaatatca aggaataaaa 60  
 atagacttttg aacaaaaagg aacatttgct ggcttgagga ggcatcacc g 111

<210> 84  
 <211> 224  
 <212> DNA  
 <213> Homo sapiens

<400> 84  
 tcgggtgatg cctcctcagg ccaagaagat aaagcttcag acccctaaca catttccaaa 60  
 aaggaagaaa ggagaaaaaa ggcatcatc cccgttccga agggtcaggg aggaggaaat 120  
 tgaggtggat tcacgagttg cggacaactc ctttgatgcc aagcgaggtg cagccggaga 180  
 ctggggagag cgagccaatc aggttttgaa gtccctctca gtgc 224

<210> 85  
 <211> 348  
 <212> DNA  
 <213> Homo sapiens

<400> 85  
 gcactgagag gaacttcggt ggaaacgggt ttttttcatg taaggctaga cagaagaatt 60  
 ctcatgaact tccttggtgt gtgtgtattc aactcacasa gttgaacgat cctttacaca 120  
 gagcagactt gtaacactct twttgtggaa ttgcaagtg gagatttcag scgctttgaa 180  
 gtsaaaggta gaaaaggaaa tatcttcta taaaactag acagaatgat tctcagaaac 240  
 tcctttgtga tgtgtgcgtt caactcacag agtttaacct ttcwtttcat agaagcagtt 300  
 aggaaacact ctgtttgtaa agtctgcaag tggatagaga ccctaacg 348

<210> 86  
 <211> 293  
 <212> DNA  
 <213> Homo sapiens

<400> 86  
 gcactgagag gaacttcyct gtgwtgktgt yattcaactc acagagttga asswtsmttt 60  
 acabagwkca ggcttkcaaa cactcttttt gtmgaatygt caagwggaka tttsrrccrc 120  
 tttgwggycw wysktmgaaw mgrpwtatc ttcwyatmra amctagacag aaksattctc 180  
 akaawstyyy ytgtgawgws tgcrttcaac tcacagagkt kaacmwtyct kytsatrgag 240  
 cagttwkgaa actctmtttc tttggattct gcaagtggat agagacccta acg 293

<210> 87  
 <211> 10  
 <212> DNA  
 <213> Artificial Sequence

<220>  
 <223> PCR primer for amplification from breast cancer  
 tumor cDNA

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<210> 88
<211> 10
<212> DNA
<213> Artificial Sequence
```

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<400> 88
agtagttgcc                                     10
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<220>  
<223> PCR primer for amplification from breast cancer  
tumor cDNA

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<210> 90
<211> 10
<212> DNA
<213> Artificial Sequence
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<400>	90	
tggtaaaggg		10

<220>  
<223> PCR primer for amplification from breast cancer  
tumor cDNA

$\langle 210 \rangle$	92
$\langle 211 \rangle$	10

<212> DNA  
 <213> Artificial Sequence

<220>

<223> PCR primer for amplification from breast cancer  
 tumor cDNA

<400> 92  
 tacaacgagg

10

<210> 93  
 <211> 10  
 <212> DNA  
 <213> Artificial Sequence

<220>

<223> PCR primer for amplification from breast cancer  
 tumor cDNA

<400> 93  
 tggattggtc

10

<210> 94  
 <211> 10  
 <212> DNA  
 <213> Artificial Sequence

<220>

<223> PCR primer for amplification from breast cancer  
 tumor cDNA

<400> 94  
 ctttctaccc

10

<210> 95  
 <211> 10  
 <212> DNA  
 <213> Artificial Sequence

<220>

<223> PCR primer for amplification from breast cancer  
 tumor cDNA

<400> 95  
 ttttggctcc

10

<210> 96  
 <211> 10  
 <212> DNA  
 <213> Artificial Sequence

<220>

<223> PCR primer for amplification from breast cancer  
 tumor cDNA

00924400-000704  
 10/0000-00000000

<400> 96  
 ggaaccaatc 10  
  
 <210> 97  
 <211> 10  
 <212> DNA  
 <213> Artificial Sequence  
  
 <220>  
 <223> PCR primer for amplification from breast cancer  
 tumor cDNA  
  
 <400> 97  
 tcgatacagg 10  
  
 <210> 98  
 <211> 10  
 <212> DNA  
 <213> Artificial Sequence  
  
 <220>  
 <223> PCR primer for amplification from breast cancer  
 tumor cDNA  
  
 <400> 98  
 ggtactaagg 10  
  
 <210> 99  
 <211> 10  
 <212> DNA  
 <213> Artificial Sequence  
  
 <220>  
 <223> PCR primer for amplification from breast cancer  
 tumor cDNA  
  
 <400> 99  
 agtctatgcg 10  
  
 <210> 100  
 <211> 10  
 <212> DNA  
 <213> Artificial Sequence  
  
 <220>  
 <223> PCR primer for amplification from breast cancer  
 tumor cDNA  
  
 <400> 100  
 ctatccatgg 10  
  
 <210> 101  
 <211> 10



<212> DNA  
 <213> Artificial Sequence  
  
 <220>  
 <223> PCR primer for amplification from breast cancer  
         tumor cDNA  
  
 <400> 101  
 tctgtccaca 10  
  
 <210> 102  
 <211> 10  
 <212> DNA  
 <213> Artificial Sequence  
  
 <220>  
 <223> PCR primer for amplification from breast cancer  
         tumor cDNA  
  
 <400> 102  
 aagagggtac 10  
  
 <210> 103  
 <211> 10  
 <212> DNA  
 <213> Artificial Sequence  
  
 <220>  
 <223> PCR primer for amplification from breast cancer  
         tumor cDNA  
  
 <400> 103  
 cttcaacctc 10  
  
 <210> 104  
 <211> 20  
 <212> DNA  
 <213> Artificial Sequence  
  
 <220>  
 <223> PCR primer for amplification from breast cancer  
         tumor cDNA  
  
 <400> 104  
 gctcctcttg ccttaccac 20  
  
 <210> 105  
 <211> 20  
 <212> DNA  
 <213> Artificial Sequence  
  
 <220>  
 <223> PCR primer for amplification from breast cancer  
         tumor cDNA

<400> 105  
 gtaagtcgag cagtgtgatg 20  
  
 <210> 106  
 <211> 20  
 <212> DNA  
 <213> Artificial Sequence  
  
 <220>  
 <223> PCR primer for amplification from breast cancer  
 tumor cDNA  
  
 <400> 106  
 gtaagtcgag cagtctgatg 20  
  
 <210> 107  
 <211> 20  
 <212> DNA  
 <213> Artificial Sequence  
  
 <220>  
 <223> PCR primer for amplification from breast cancer  
 tumor cDNA  
  
 <400> 107  
 gacttagtgg aaagaatgta 20  
  
 <210> 108  
 <211> 20  
 <212> DNA  
 <213> Artificial Sequence  
  
 <220>  
 <223> PCR primer for amplification from breast cancer  
 tumor cDNA  
  
 <400> 108  
 gtaattccgc caaccgtagt 20  
  
 <210> 109  
 <211> 20  
 <212> DNA  
 <213> Artificial Sequence  
  
 <220>  
 <223> PCR primer for amplification from breast cancer  
 tumor cDNA  
  
 <400> 109  
 atggttgatc gatagtggaa 20  
  
 <210> 110  
 <211> 20







<400> 123  
 gtatcgacgt agtgggtctcc 20  
  
 <210> 124  
 <211> 20  
 <212> DNA  
 <213> Artificial Sequence  
  
 <220>  
 <223> PCR primer for amplification from breast cancer  
 tumor cDNA  
  
 <400> 124  
 tagtgacatt acgacgctgg 20  
  
 <210> 125  
 <211> 20  
 <212> DNA  
 <213> Artificial Sequence  
  
 <220>  
 <223> PCR primer for amplification from breast cancer  
 tumor cDNA  
  
 <400> 125  
 cggtgatgc ctcctcaggc 20  
  
 <210> 126  
 <211> 23  
 <212> DNA  
 <213> Artificial Sequence  
  
 <220>  
 <223> PCR primer for amplification from breast cancer  
 tumor cDNA  
  
 <400> 126  
 atggctatatt tcgggggctg aca 23  
  
 <210> 127  
 <211> 22  
 <212> DNA  
 <213> Artificial Sequence  
  
 <220>  
 <223> PCR primer for amplification from breast cancer  
 tumor cDNA  
  
 <400> 127  
 ccggtatctc ctcgtgggta tt 22  
  
 <210> 128  
 <211> 18

<212> DNA  
 <213> Artificial Sequence

<220>

<223> PCR primer for amplification from breast cancer  
 tumor cDNA

<400> 128

ctgcctgagc cacaaatg

18

<210> 129

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tagcatgttg agcccagaca cttgtagaga gaggaggaca gttagaagaa gaagaaaagt 60
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cagaggatgc ttgcagaaa cttcataaat atatgcagg gattccttat ttcctcctag 180
aaatttagtg atatttgaaa taatgcccaa acttaatttt ctctgagga aaactattct 240
acattactta agtaaggcat tatgaaaagt ttcttttttag gtatagtttt tcctaattgg 300
gtttgacatt gcttcatagt gcctctgttt ttgtccataa tcgaaagtaa agatagctgt 360
gagaaaacta ttacctaaat ttggtatggt gttttgagaa atgtccttat agggagctca 420
cctggtgggt tttaaattat tgttgctact ataattgagc taattataaa aacctttttg 480
agacatattt taaattgtct ttctctgtaa tactgatgat gatgttttct catgcatttt 540
cttctgaatt gggaccattg ctgctgtgtc tgggctcaca tgcta 585

```

```

<210> 147
<211> 579
<212> DNA
<213> Homo sapiens

```

```

<220>
<221> misc_feature
<222> 383, 453, 465, 501
<223> n = A,T,C or G

```

```

<400> 147
tagcatgttg agcccagaca ctgggcagcg ggggtggcca cggcagctcc tgccgagccc 60
aagcgtgttt gtctgtgaag gaccctgacg tcacctgcca ggctagggag gggcaatgt 120
ggagtgaatg ttcaccgact ttcgcaggag tgtgcagaag ccagggtgcaa cttgggtttgc 180
ttgtgttcat caccocctcaa gatatgcaca ctgctttcca aataaagcat caactgtcat 240
ctccagatgg ggaagacttt ttctccaacc agcaggcagg tccccatcca ctccagacacc 300
agcacgtcca ccttctcggg cagcaccacg tctccacct tctgctggta cacggtgatg 360
atgtcagcaa agccgttctg cangaccagc tgccccgtgt gctgtgccat ctactggcc 420
tccaccgctg acaccgctct aggccgcgca tantgtgcac agaanaaatg atgatccagt 480
cccacagccc acgtccaaga ngactttatc cgtcagggat tctttattct gcaggatgac 540
ctgtgtgtatt aattgttcgt gtctgggctc aacatgcta 579

```

```

<210> 148

```

<400>	151						
tnacgcngcn	acnntgtaga	ganggnaagg	cnttcccac	attncacctt	catnanagaa	60	
ttattcnacc	aagntgacc	natgccnttt	atgacttaca	tgcnnactnc	ntaatctgtn	120	
tcnngcctta	aaagcnnntc	cactacatgc	ntcancactg	tntgtgtnac	ntcatnaact	180	
gtcngnaata	ggggcncata	actacagaaa	tgcanttcac	actgcttcca	ntgccatcng	240	

```

cgtgtggcct tncctactct tcttntattc caagtagcat ctctggantg cttccccact 300
ctccacattg ttgcagcnat aat                                     323

```

```

<210> 152
<211> 311
<212> DNA
<213> Homo sapiens

```

```

<400> 152
tcaagattcc ataggctgac cagtccaagg agagttgaaa tcatgaagga gagtctatct 60
ggagagagct gtagttttga ggggttgcaaa gacttaggat ggagttgggtg ggtgtgggta 120
gtctctaagg ttgattttgt tcataaaatt catgccctga atgccttgct tgcctcacc 180
tggtccaagc cttagtgaac acctaaaagt ctctgtcttc ttgctctcca aacttctcct 240
gaggatttcc tcagattgtc tacattcaga tcgaagccag ttggcaaaca agatgcagtc 300
cagaggggtca g                                     311

```

```

<210> 153
<211> 332
<212> DNA
<213> Homo sapiens

```

```

<400> 153
caagattcca taggctgacc aggaggctat tcaagatctc tggcagttga ggaagtctct 60
ttaagaaaat agtttaaaca atttgttaaa atttttctgt cttacttcat ttctgtagca 120
gttgatatct ggctgtcctt ttataaatgc agagtgggaa ctttccttac catgtttgat 180
aaatgttgtc caggctccat tgccaataat gtgttggtcca aaatgcctgt ttagttttta 240
aagacggaac tccacccttt gcttgggtct aagtatgtat ggaatgttat gataggacat 300
agtagtagcg gtggtcagcc tatggaatct tg                                     332

```

```

<210> 154
<211> 345
<212> DNA
<213> Homo sapiens

```

```

<220>
<221> misc_feature
<222> 154, 224, 297, 330
<223> n = A,T,C or G

```

```

<400> 154
tcaagattcc ataggctgac ctggacagag atctcctggg tctggcccag gacagcaggc 60
tcaagctcag tggagaaggt ttccatgacc ctccagattcc cccaaacctt ggattgggtg 120
acattgcata tctcagaga gggaggagat gtangtctgg gcttccacag ggacctggta 180
ttttaggatc aggggtaccgc tggcctgagg cttggatcat tcanagcctg ggggtggaat 240
ggctggcagc ctgtggcccc attgaaatag gctctggggc actccctctg ttcctanttg 300
aacttgggta aggaacagga atgtggtcan cctatggaat cttga                                     345

```

```

<210> 155
<211> 295
<212> DNA
<213> Homo sapiens

```

```

<220>
<221> misc_feature

```



<222> 46, 199, 252, 266

<223> n = A,T,C or G

<400> 155

```
gacgcttggc cacttgacac attaaacagt tttgcataat cactancatg tatttctagt 60
ttgctgtctg ctgtgatgcc ctgccctgat tctctggcgt taatgatggc aagcataatc 120
aaacgctgtt ctgttaattc caagttataa ctggcattga ttaaagcatt atctttcaca 180
actaaactgt tcttcatana acagcccata ttattatcaa attaagagac aatgtattcc 240
aatatccttt anggccaata tatttnatgt cccttaatta agagctactg tccgt      295
```

<210> 156

<211> 406

<212> DNA

<213> Homo sapiens

<220>

<221> misc\_feature

<222> 172, 178, 332, 338, 342, 381, 400, 402

<223> n = A,T,C or G

<400> 156

```
gacgcttggc cacttgacac tgcagtggga aaaccagcat gagccgctgc cccaaggaa 60
cctcgaagcc caggcagagg accagccatc ccagcctgca ggtaaagtgt gtcacctgtc 120
aggtgggctt ggggtgagtg ggtgggggaa gtgtgtgtgc aaagggggtg tnaatgtnta 180
tgcgtgtgag catgagtgat ggctagtgtg actgcatgtc agggagtgtg aacaagcgtg 240
cggggggtgtg tgtgcaagtg cgtatgcata tgagaatatg tgtctgtgga tgagtgcatt 300
tgaaagtctg tgtgtgtgctg tgtgggtcatg anggtaantt antgactgcg caggatgtgt 360
gagtgtgcat ggaacactca ntgtgtgtgt caagtggccn ancgtc      406
```

<210> 157

<211> 208

<212> DNA

<213> Homo sapiens

<220>

<221> misc\_feature

<222> 115, 119, 182, 187

<223> n = A,T,C or G

<400> 157

```
tgacgcttgg ccacttgaca cactaaaggg tgttactcat cactttcttc tctcctcggg 60
ggcatgtgag tgcattctatt cacttggcac tcatttgttt ggcagtgact gtaanccana 120
tctgatgcat acaccagctt gtaaattgaa taaatgtctc taatactatg tgctcacaat 180
anggtanggg tgaggagaag gggagaga      208
```

<210> 158

<211> 547

<212> DNA

<213> Homo sapiens

<220>

<221> misc\_feature

<222> 235

<223> n = A,T,C or G

&lt;400&gt; 158

```

cttcaacctc cttcaacctc cttcaacctc ctggattcaa acaatcatcc cacctcagac 60
tccttagtag ctgagactac agactcacgc cactacatct ggctaaatTT ttgtagagat 120
agggtttcat catgttgccc tggctgggtct caaactcctg acctcaagca atgtgcccac 180
ctcagcctcc caaagtgtct ggattacagg cataagccac catgcccagt ccatntttaa 240
tctttcctac cacattctta ccacactttc ttttatgttt agatacataa atgcttacca 300
ttatgataca attgcccaaca gtattaagac agtaacatgc tgcacagggt ttgtagcctag 360
gaacagtagg caataccaca tagcttaggt gtgtggtaga ctataccatc taggtttgtg 420
taagttacac tttatgtctgt ttacacaatg acaaaaccat ctaatgatgc atttctcaga 480
atgtatcctt gtcagtaagc tatgatgtac aggggaacact gcccaaggac acagatattg 540
tacctgt 547

```

&lt;210&gt; 159

&lt;211&gt; 203

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 159

```

gctcctcttg ccttaccac tcacccagta tgtcagcaat tttatcrgct ttacctacga 60
aacagcctgt atccaaacac ttaacacact cacctgaaaa gttcaggcaa caatcgccctt 120
ctcatgggtc tctctgtctc agttctgaac ctttctcttt tcctagaaca tgcatttarg 180
tcgatagaag ttccctctcag tgc 203

```

&lt;210&gt; 160

&lt;211&gt; 402

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 160

```

tgtaagtcca gcagtgtgat ggggtggaaca gggttgtaag cagtaattgc aaactgtatt 60
taaacaataa taataatatt tagcatTTTat agagcacttt atatcttcaa agtacttgca 120
aacattayct aattaaatac cctctctgat tataatctgg atacaaatgc acttaaaactc 180
aggacagggt catgagaraa gtatgcattt gaaagttggg gctagctatg ctttaaaaaac 240
ctatacaatg atgggraagt tagagttcag attctgttgg actgtttttg tgcatttcag 300
ttcagcctga tggcagaatt agatcatac tgcactcgat gactytgctt gataacttat 360
cactgaaatc tgagtgttga tcatcacact gctcgactta ca 402

```

&lt;210&gt; 161

&lt;211&gt; 193

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 161

```

agcatgttga gccagacac tgaccaggag aaaaaccaac caatagaaac acgcccagac 60
actgaccagg agaaaaacca accaataaaa acaggcccggt acataagaca aataataaaa 120
ttagcggaca aggacatgaa aacagctatt gtaagagcgg atatagtggg gtgtgtctgg 180
gctcaacatg cta 193

```

&lt;210&gt; 162

&lt;211&gt; 147

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

<400> 162

```
tgttgagccc agacactgac caggagaaaa accaaccaat aaaaacaggc ccggacataa 60
gacaaataat aaaattagcg gacaaggaca tgaaaacagc tattgtaaga gcggatatag 120
tgggtgtgtgt ctgggctcaa catgcta 147
```

<210> 163

<211> 294

<212> DNA

<213> Homo sapiens

<400> 163

```
tagcatgttg agcccagaca caaatctttc cttaagcaat aaatcatttc tgcataatggtt 60
tttaaaacca cagctaagcc atgattattc aaaaggacta ttgtattggg tattttgatt 120
tgggttctta tctccctcac attatcttca tttctatcat tgacctctta tcccagagac 180
tctcaaactt ttatgttata caaatcacat tctgtctcaa aaaatatctc acccacttct 240
cttctgtttc tgcgtgtgta tgtgtgtgtg tgtgtgtctg ggctcaacat gcta 294
```

<210> 164

<211> 412

<212> DNA

<213> Homo sapiens

<220>

<221> misc\_feature

<222> 292

<223> n = A,T,C or G

<400> 164

```
cgggattggc tttgagctgc agatgctgcc tgtgaccgca cccggcgtgg aacagaaaagc 60
cacctggctg caagtgcgcc agagccgccc tgactacgtg ctgctgtggg gctggggcgt 120
gatgaactcc accgccctga aggaagccca ggccaccgga tccccccgag acaagatgta 180
cggcgtgtgg tgggccggtg cggagcccga tgtgcgtgac gtgggcgaag gcgccaaggg 240
ctacaacgag ctggctctga acggctacgg cacgcagtcc aaggtgatcc angacatcct 300
gaaacacgtg cagcacaagg gccagggcac ggggcccaca gacgaagtgg gctcgggtgct 360
gtacaccgcg ggcgtgatca tccagatgct ggacaagggtg tcaatcacta at 412
```

<210> 165

<211> 361

<212> DNA

<213> Homo sapiens

<400> 165

```
ttgacacctt gtccagcatc tgcattctgat gagagcctca gatggctacc actaatggca 60
gaaggcaaaag gagaacaggc attgtatggc aagaaaggaa gaaagagaga ggggagaaaag 120
gtgctaggtt cttttcaaca accagttctt gatggaactg agagtaagag ctcaaggcca 180
ggtgtggtga ctccaaccag taatcccaac attttaggag gctgaggcag gcagatgtct 240
tgaccccatg agtttgtgac cagcctgaac aacatcatga gactccatct ctacaataat 300
tacaaaaatt aatcaggcat tgtggtatgc cctgtagtcc cagatgctgg acaagggtgc 360
a 361
```

<210> 166

<211> 427

<212> DNA

<213> Homo sapiens

<400> 166  
 twgactgact catgtccctt acacccaact atcttctcca ggtggccagg catgatagaa 60  
 tctgatcctg acttagggga atatcttctt tttacttccc atcttgattc cctgccgggtg 120  
 agtttcctgg ttcagggtaa gaaaggagct caggccaaag taatgaacaa atccatcctc 180  
 acagacgtac agaataagag aacwtggacw tagccagcag aacmcaaktg aaamcagaac 240  
 mcttamctag gatracaamc merraratar ktgcycmcmc wtataataga aaccaaactt 300  
 gtatctaatt aaatatattat ccacygtcag ggcattagtg gttttgataa atacgctttg 360  
 gctaggattc ctgaggttag aatggaaraa caattgcamc gagggtaggg gacatgagtc 420  
 aktctaa 427

<210> 167  
 <211> 500  
 <212> DNA  
 <213> Homo sapiens

<220>  
 <221> misc\_feature  
 <222> 288, 303, 318, 326  
 <223> n = A,T,C or G

<400> 167  
 aacgtcgcat gctcccgcc gccatggccg cgggatagac tgactcatgt cccctaagat 60  
 agaggagaca cctgctagggt gtaaggagaa gatgggttagg tctacggagg ctccagggtg 120  
 ggagtagttc cctgctaagg gagggtagac tgttcaacct gttcctgctc cggcctccac 180  
 tatagcagat gcgagcagga gtaggagaga gggaggtaag agtcagaagc ttatgttggt 240  
 tatgcgggga aacgccttat cgggggcagc cragttatta ggggacantr tagwyartcw 300  
 agntagcatc caaagcgnng gagttntccc atatggttgg acctgcaggc ggccgcatta 360  
 gtgattagca tgtgagcccc agacacgcat agcaacaagg acctaaactc agatcctgtg 420  
 ctgattactt aacatgaatt attgtattta tttacaact ttgagttatg aggcataatta 480  
 ttaggtccat attacctgga 500

<210> 168  
 <211> 358  
 <212> DNA  
 <213> Homo sapiens

<400> 168  
 ttcattgctc ggtgactcaa gcctgtaatc ccagaacttt gggaggccga ggggagcaga 60  
 tcacctgagg ttgggagttt gagaccagcc tggccaacat ggtgacaacc cgtctctgct 120  
 aaaaatacaa aaattagcca agcatggtgg catgcacttg taatcccagc tactcgggag 180  
 gctgaggcag gagaatcact tgaggccagg aggcagaggt tgcagtgagg cagaggttga 240  
 gatcatgcca ctgcactcca gcctgggcaa cagagtaaga ctccatctca aaaaaaaaaa 300  
 aaaaaaagaa tgatcagagc cacaaataca gaaaaccttg agtcaccgag cgatgaaa 358

<210> 169  
 <211> 1265  
 <212> DNA  
 <213> Homo sapiens

<400> 169  
 ttctgtccac accaatctta gagctctgaa agaatttgtc tttaaatata ttttaatagt 60  
 aacatgtatt ttatggacca aattgacatt ttcgactatt ttttccaaa aaaagtcagg 120  
 tgaatttcag cacactgagt tgggaatttc ttatccaga agwcggcacg agcaatttca 180



<221> misc\_feature  
 <222> 641  
 <223> n = A,T,C or G

<400> 172

```
tcgggtgatg cctcctcagg cttgtcgtta gtgtacacag agctgctcat gaagcgacag 60
cggtgcccc tggcacttca gaacctcttc ctctacactt ttggtgcgct tctgaatcta 120
ggtctgcatg ctggcggcgg ctctggccca ggctcctgg aaagtttctc aggatgggca 180
gcactcgtgg tgctgagcca ggcactaaat ggactgctca tgtctgctgt catggagcat 240
ggcagcagca tcacacgcct ctttgtggtg tcctgctcgc tgggtggtaa cgcctgctc 300
tcagcagtcc tgctacggct gcagctcaca gccgccttct tcctggccac attgctcatt 360
ggcctggcca tgcgcctgta ctatggcagc cgctagtccc tgacaacttc caccctgatt 420
ccggaccctg tagattgggc gccaccacca gatccccctc ccaggccttc ctccctctcc 480
catcagcggc cctgtaacaa gtgccttgtg agaaaagctg gagaagtgag ggcagccagg 540
ttattctctg gaggttgggt gatgaagggg tacccttagg agatgtgaag tgtgggtttg 600
gttaaggaaa tgcttaccat cccccacccc caaccaagtt nttccagact aaagaattaa 660
ggtaacatca atacctaggc ctgaggaggc atcaccga 699
```

<210> 173  
 <211> 701  
 <212> DNA  
 <213> Homo sapiens

<400> 173

```
tcgggtgatg cctcctcagg ccagatcaaa cttgggggttg aaaactgtgc aaagaaatca 60
atgtcggaga aagaattttg caaaagaaaa atgcctaata agtactaatt taatagggtca 120
cattagcagt ggaagaagaa atgttgatat tttatgtcag ctattttata atcaccagag 180
tgcttagctt catgtaagcc atctcgtatt cattagaaat aagaacaatt ttattcgtcg 240
gaaagaactt ttcaatttat agcatcttaa ttgctcagga ttttaaattt tgataaagaa 300
agctccactt ttggcaggag tagggggcag ggagagagga ggctccatcc acaaggacag 360
agacaccagg gccagtaggg tagctgggtg ctggatcagt cacaacggac tgacttatgc 420
catgagaaga aacaacctcc aaatctcagt tgcttaatac aacacaagct catttcttgc 480
tcacgttaca tgctctatgt agatcaacag cagggtgactc agggacccag gctccatctc 540
catatgagct tccatagtca ccaggacacg ggctctgaaa gtgtcctcca tgcagggaca 600
catgcctctt cctttcattg ggcagagcaa gtcacttatg gccagaagtc acactgcagg 660
gcagtgccat cctgctgtat gcctgaggag gcatcaccga a 701
```

<210> 174  
 <211> 700  
 <212> DNA  
 <213> Homo sapiens

<220>  
 <221> misc\_feature  
 <222> 19  
 <223> n = A,T,C or G

<400> 174

```
tcgggtgatg cctcctcang cccctaaatc agagtccagg gtcagagcca caggagacag 60
ggaaagacat agattttaac cgccccctt caggagattc tgaggctcag ttcactttgt 120
tgcagtttga acagaggcag caaggctagt ggttaggggc acggtctcta aagctgcact 180
gcctggatct gcctcccagc tctgcccaga accagctgcg tggccttgag ctgctgacac 240
gcagaaagcc cctgtggac ccatctcct cgtctgtaag atgaggacag gactctagga 300
accctttccc ttgggttggc ctcaacttca caggctocca tcttgaactc tatctactct 360
```

```

tttcctgaaa ccttgtaaaa gaaaaaagtg ctagcctggg caacatggca aaaccctgtc 420
tctacaaaaa atacaaaaat tagttgggtg tgggtggcatg tgctgtagt cccagccact 480
tgggaggtgc tgaggtggga ggatcacttg agcccgggag gtggaggttg cagtgaacca 540
agatcatgcc actgcactcc agcctgagta atagagtaag actctgtctc aaaaaacaaca 600
acaacaacag tgagtgtgcc tctgtttccg ggttggatgg ggaccacat ttatgcatct 660
ctcagatttg gacgtgcag cctgaggagg catcacccga 700

```

```

<210> 175
<211> 484
<212> DNA
<213> Homo sapiens

```

```

<220>
<221> misc_feature
<222> 30
<223> n = A,T,C or G

```

```

<400> 175
tatagggcga attgggcccg agttgcatgn tcccggccgc catggccgcg ggattcgggt 60
gatgcctcct caggcttgct tgccacaagc tacttctctg agctcagaaa gtgcccttg 120
atgagggaaa atgtcctact gcactgcgaa tttctcagtt ccattttacc tcccagtcct 180
ccttctaaac cagttaataa attcattcca caagtattta ctgattacct gcttgtgcca 240
gggactattc tcaggctgaa gaagggtggga ggggaggcg gaacctgagg agccacctga 300
gccagcttta tatttcaacc atggctggcc catctgagag catctcccca ctctcgccaa 360
cctatcgggg catagcccag ggatgcccc aggcggccca ggtagatgc gtccctttgg 420
cttgtcagtg atgacataca ccttagctgc ttagctggtg ctggcctgag gaggcatcac 480
ccga 484

```

```

<210> 176
<211> 432
<212> DNA
<213> Homo sapiens

```

```

<400> 176
tcgggtgatg cctcctcagg gctcaaggga tgagaagtga cttctttctg gagggaccgt 60
tcatgccacc caggatgaaa atggataggg acccacttgg aggacttgct gatatgtttg 120
gacaaatgcc aggtagcgga attggtactg gtccaggagt tatccaggat agattttcac 180
ccaccatggg acgtcatcgt tcaaataaac tcttcaatgg ccatggggga cacatcatgc 240
ctccacacac atcgcagttt ggagagatgg gaggcaagtt tatgaaaagc caggggctaa 300
gccagctcta ccataaccag agtcagggac tcttatccca gctgcaagga cagtcgaagg 360
atatgccacc tcggttttct aagaaaggac agcttaatgc agatgagatt agcctgagga 420
ggcatcacc ga 432

```

```

<210> 177
<211> 788
<212> DNA
<213> Homo sapiens

```

```

<400> 177
tagcatgttg agcccagaca cagtagcatt tgtgccatt tctggttga atggtgacaa 60
catgctggag ccaagtgcta acatgccttg gttcaaggga tggaaagtca cccgtaagga 120
tggcaatgcc agtgaacca cgctgcttga ggctctggac tgcatcctac caccaactcg 180
cccaactgac aagcccttgc gcctgcctct ccaggatgtc tacaaaattg gtggtattgg 240
tactgttcct gttggccgag tggagactgg tgttctcaaa cccggtatgg tggtcacctt 300

```

```
<210> 178
<211> 786
<212> DNA
<213> Homo sapiens
```

```
<210> 179
<211> 796
<212> DNA
<213> Homo sapiens
```

$\langle 210 \rangle$	180
$\langle 211 \rangle$	488



<212> DNA  
<213> Homo sapiens

<400> 180  
ggatgtgctg caaggcgatt aagttgggta acgccagggt tttcccagtc acgacgttgt 60  
aaaacgacgg ccagtgaatt gtaatacgac tcaactatagg gcgaattggg cccgacgtcg 120  
catgctcccg gccgccatgg ccgcgggata gcatgttgag ccagacacc tgcaggtcat 180  
ttggagagat ttttcacgtt accagcttga tggctctttt caggaggaga gacactgagc 240  
actcccaagg tgaggttgaa gatttcctct agatagccgg ataagaagac taggagggat 300  
gcctagaaaa tgattagcat gcaaatttct acctgccatt tcagaactgt gtgtcagccc 360  
acattcagct gcttcttggt aactgaaaag agagaggat tgagactttt ctgatggccg 420  
ctctaacatt gtaacacagt aatctgtgtg tgtgtgggtg tgtgtgtgtg tctgggctca 480  
acatgcta 488

<210> 181  
<211> 317  
<212> DNA  
<213> Homo sapiens

<400> 181  
tagcatgttg agcccagaca cggcgacggt acctgatgag tggggtgatg gcacctgtga 60  
aaaggaggaa cgctcatcccc catgatattg gggaccaga tgatgaacca tggctccgcg 120  
tcaatgcata tttaatccat gatactgctg attggaagga cctgaacctg aagtttgtgc 180  
tgcaggttta tcgggactat tacctcacgg gtgatcaaaa cttcctgaag gacatgtggc 240  
ctgtgtgtct agtaagggat gcacatgcag tggccagtgt gccaggggta tggttggtgt 300  
ctgggctcaa catgcta 317

<210> 182  
<211> 507  
<212> DNA  
<213> Homo sapiens

<220>  
<221> misc\_feature  
<222> 493  
<223> n = A,T,C or G

<400> 182  
tagcatgttg agcccagaca ctggctgtta gccaaatcct ctctcagctg ctccctgtgg 60  
tttggtgact caggattaca gaggcacccct gtttcaggga acaaaaagat tttagctgcc 120  
agcagagagc accacatata ttagaatggt aaggactgcc acctccttca agaacaggag 180  
tgagggtggt ggtgaatggg aatggaagcc tgcattccct gatgcatttg tgctctctca 240  
aatcctgtct tagtcttagg aaaggaagta aagtttcaag gacggttccg aactgctttt 300  
tgtgtctggg ctcaacatgc tatcccgcgg ccatggcggc cgggagcatg cgacgtcggg 360  
cccaattcgc cctatagtga gtcgtattac aattcactgg ccgtcgtttt acaacgtcgt 420  
gactgggaaa accctggcgt taccctaactt aatcgccctg cagcacatcc ccctttccca 480  
gctggcgtaa tancgaaaag gcccgcga 507

<210> 183  
<211> 227  
<212> DNA  
<213> Homo sapiens

<400> 183

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gatttacgct gcaacactgt ggaggtagcc ctggagcaag gcaggcatgg atgcttctgc 60
aatcccaaaa tggagcctgg tatttcagcc aggaatctga gcagagcccc ctctaattgt 120
agcaatgata agttattctc tttgttcttc aaccttccaa tagccttgag cttccagggg 180
agtgtcggtta atcattacag cctgggtctcc acagtgttgc agcgtaa 227

```

<210> 184

<211> 225

<212> DNA

<213> Homo sapiens

<400> 184

```

ttacgctgca aactgtgga gcagattaac atcagacttt tctatcaaca tgactgggggt 60
tactaaaaag acaacaaatc aatggcttca aaagtctaag gaataatttc gatacttcaa 120
ctttataaaa cctgacaaaa ctatcaatca agcataaaga cagatgaaga acatttccag 180
attttggcca atcagatatt ttacctccac agtggtgcag cgtaa 225

```

<210> 185

<211> 597

<212> DNA

<213> Homo sapiens

<400> 185

```

ggcccgacgt cgcattgtcc cgcccgccat ggcccgcgga ttcgtaggg tctctatcca 60
ctgggaccca taggctagtc agagtattta gagttgagtt cctttctgct tcccagaatt 120
tgaaagaaaa ggagtgaagg gatagagctg agagatcaga tttgcctctg aagcctgttc 180
aagatgtatg tgctcagacc ccaccactgg ggccctgtgg tgaggctcctg ggcattctatt 240
tgaatgaatt gctgaagggg agcactatgc caagggaagg gaacccatcc tggcactggc 300
acaggggtca ccttatccag tgctcagtgc ttctttgctg ctacctggtt ttctctcata 360
tgtgaggggc aggtagaag aagtgccrg tggtgtgcga gttttagaac atctaccagt 420
aagtggggaa gtttcacaaa gcagcagctt tgttttgtgt attttcacct tcagttagaa 480
gaggaaggct gtgagatgaa tgtagttga gtggaaaaga cgggtaagct tagtggatag 540
agaccctaac gaatcactag tgcggccgcc ttgcaggtcg accatatggg agagctc 597

```

<210> 186

<211> 597

<212> DNA

<213> Homo sapiens

<400> 186

```

ggcccgaaat tgcattgtcc cgcccgccat ggcccgcgga ttcgtaggg tctctatcca 60
ctacctaaaa aatcccaaac atataactga actcctcaca cccaattgga ccaatccatc 120
acccagagg cctacagatc ctcccttgat acataagaaa atttcccaa actacctaac 180
tatatcattt tgcaagattt gttttacca attttgatgg cctttctgag cttgtcagt 240
tgaaccacta ttacgaacga tcggatatta actgcccctc accgtccagg ttagctggc 300
aacatcaagt gcagtaaata ttcattaagt ttccacctac taagggtgctt aaacacccta 360
gggtgccatg tcggtagcag atcttttgat ttgtttttat ttcccataag ggctcctgttc 420
aagggtcaatc atacatgtag tgtgagcagc tagtcactat cgcattgactt ggagggtgat 480
aatagaggcc tcctttgctg ttaaagaact cttgtccag cctgtcaaag tggatagaga 540
ccctaacgaa tcaactagtgc ggccgcctgc aggtcgacca tatgggagag ctcccaa 597

```

<210> 187

<211> 324

<212> DNA

<213> Homo sapiens

<400> 187  
 tcgttagggg ctctatccac ttgcaggtaa aatccaatcc tgtgtatatc ttatagtctt 60  
 ccatatgtag tgggtcaaga gactgcagtt ccagaaagac tagccgagcc catccatgtc 120  
 ttccacttaa ccctgctttg ggttacacat cttaactttt ctgttcaagt ttctctgtgt 180  
 agtttatagc atgagtattg ggawaatgcc ctgaaacctg acatgagatc tgggaaacac 240  
 aaacttactc aataagaatt tctcccatat ttttatgatg gaaaaatttc acatgcacag 300  
 aggagtggat agagacccta acga 324

<210> 188  
 <211> 178  
 <212> DNA  
 <213> Homo sapiens

<220>  
 <221> misc\_feature  
 <222> 46  
 <223> n = A,T,C or G

<400> 188  
 gcgcgggggat tcgggggtgat acctcctcat gccaaaatac aacgtntaat ttcacaactt 60  
 gccttccaat ttacgcattt tcaatttgct ctccccattt gttgagtcac aacaaacacc 120  
 attgcccaga aacatgtatt acctaacatg cacatactct taaaactact catccctt 178

<210> 189  
 <211> 367  
 <212> DNA  
 <213> Homo sapiens

<400> 189  
 tgacaccttg tccagcatct gacacagtct tggctcttgg aaaatattgg ataaatgaaa 60  
 atgaatttct ttagcaagtg gtataagctg agaatatacg tatcacatat cctcattcta 120  
 agacacattc agtgtccctg aaattagaat aggacttaca ataagtgtgt tcactttctc 180  
 aatagctggt attcaattga tggtaggcct taaaagtcaa agaaatgaga gggcatgtga 240  
 aaaaaagctc aacatcactg atcattagaa aacttccatt caaaccccca atgagatacc 300  
 atctcatacc agtcagaatg gctattatta aaaagtcaaa aaataacaga tgctggacaa 360  
 ggtgtca 367

<210> 190  
 <211> 369  
 <212> DNA  
 <213> Homo sapiens

<220>  
 <221> misc\_feature  
 <222> 323  
 <223> n = A,T,C or G

<400> 190  
 gacaccttgt ccagcatctg acaacgctaa cagcctgagg agatctttat ttattttattt 60  
 agtttttact ctggctaggc agatggtggc taaaacattc atttaccat ttattcattt 120  
 aattgttctt gcaaggccta tggatagagt attgtccagc actgctctgg aagctaggag 180  
 catggggatg aacaagatag gctacatcct gttcccacag aacttccact ttagtctggg 240  
 aaacagatga tatatacaaa tatataaatg aattcaggta gttttaagta cgaaaagaat 300

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aagaaagcag agtcatgatt tanaatgctg gaaacagggg ctattgcttg agatattgaa 360  
 ggtgcccaa 369

<210> 191  
 <211> 369  
 <212> DNA  
 <213> Homo sapiens

<400> 191  
 tgacaccttg tccagcatct gcacagggaa aagaaactat tatcagagtg aacaggcaac 60  
 ctacagaatg ggagaaaatt tttgcaatct atccatctga caaagggcta atatccagaa 120  
 tctacaaaga acttatacaa atttacaaga aacaaacaaa caaacaactc ctcaaaaagt 180  
 ggggtgaagga tgtgaacaga cacttctcaa aagaagacat ttatggggcc aacaaacata 240  
 tgaaaaaaag ctcatcatca ctggtcacta gataaatgca aatcaaaaacc acaatgagat 300  
 accatctcat tccagttaga atggcaatca ttaaaaagtc aggaaacaac agatgctgga 360  
 caaggtgtc 369

<210> 192  
 <211> 449  
 <212> DNA  
 <213> Homo sapiens

<400> 192  
 tgacgcttgg ccacttgaca cttcatcttt gcacagaaaa acttctttac agattttaatt 60  
 caagactggg ctagtgacag tcctccagac attttttcat ttgttccata tacgtggaat 120  
 tttaaaatca tgtttcatca gtttgaaatg atttgggctg ctaatcaaca caattggatc 180  
 gactgttcta ctaaacaaca ggaaaatgtg tatctggcag cctgtggaga aacactaaac 240  
 attgattttt ctttgccctt tacggacttt gttccagcta catgtaatac caagtctctt 300  
 ttaagaggag aagatggttg tcttcatttg tttctaccag actgccaccc tagtaaatat 360  
 tctttattta tgctggtaaa aaattgccat ccaaataaga tgattcatga tactgggtatt 420  
 cctgctgagt gtcaagtggc caagcgtca 449

<210> 193  
 <211> 372  
 <212> DNA  
 <213> Homo sapiens

<400> 193  
 tgacgcttgg ccacttgaca ccagggatgt akcagttgaa tataatcctg caattgtaca 60  
 tattggcaat ttcccatcaa acattctaga aagagacaac caggattgct aggccataaa 120  
 agctgcaata aataactggg aattgcagta atcatttcag gccattcaa tccagtttgg 180  
 ctacagaggtg cctttggctg agagaagagg tgagatataa tgtgttttct tgcaacttct 240  
 tggaagaata actccacaat agtctgagga ctagatacaa acctatttgc cattaaagca 300  
 ccagagtctg ttaattccag tactgataag tgttggagat tagactccag tgtgtcaagt 360  
 ggccaagcgt ca 372

<210> 194  
 <211> 309  
 <212> DNA  
 <213> Homo sapiens

<220>  
 <221> misc\_feature  
 <222> 140, 205

<223> n = A,T,C or G

<400> 194

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tgacgcttgg ccacttgaca cttatgtaga atccatcgtg ggctgatgca agccctttat 60
ttaggcttag tgttgtgggc accttcaata tcacactaga gacaaacgcc acaagatctg 120
cagaaacatt cagttctgan cactcgaatg gcaggataac tttttgtgtt gtaatccttc 180
acatatataa aaacaaactc tgcantctca cgttacaaaa aaacgtactg ctgtaaaata 240
ttaagaaggg gtaaaggata ccatctataa caaagtaact tacaactagt gtcaagtggc 300
caagcgtca 309
```

<210> 195

<211> 312

<212> DNA

<213> Homo sapiens

<220>

<221> misc\_feature

<222> 100, 270

<223> n = A,T,C or G

<400> 195

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tgacgcttgg ccacttgaca cccaatctcg cacttcatcc tcccagcacc tgatgaagta 60
ggactgcaac tatccccact tcccagatga ggggaccaan gtacacatta ggacccggat 120
gggagcacag atttgtccga tcccagactc caagcactca gcgtcactcc aggacagcgg 180
ctttcagata aggtcacaaa catgaatggc tccgacaacc ggagtcagtc cgtgctgagt 240
taaggcaatg gtgacacgga tgcacgtgtn acctgtaatg gttcatcgta agtgtcaagt 300
ggccaagcgt ca 312
```

<210> 196

<211> 288

<212> DNA

<213> Homo sapiens

<400> 196

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tgtatcgacg tagtgggtctc ctcagccatg cagaactgtg actcaattaa acctctttcc 60
tttatgaatt acccaatctc gggtagtgct tttatagtag tgtgagaatg gactaatata 120
agtacatttt acttagtaat aataataaac aaatatatta cttttttgtg tattttactac 180
accatatttt ttattgttat tgtagtgtag accttctact tattaaaaga aataggccccg 240
aggcgggcag atcacgaggt caggagatgg agaccactac gtcgatac 288
```

<210> 197

<211> 289

<212> DNA

<213> Homo sapiens

<400> 197

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ttgggcacct tcaatatcat gacagggtgat gtgataacca agaaggctac taagtgatta 60
atgggtgggt aatgtatata gagtaggtac actggacaga ggggtaattc atagccaagg 120
caggagaagc agaatggcaa aacatttcat cacactactc aggatagcat gcagtttaaa 180
acctataagt agtttatttt tggaattttc cacttaatat tttcagactg caggtaacta 240
aactgtggaa cacaagaaca tagataaggg gagaccacta cgtcgatac 289
```

<210> 198

<211> 288

<212> DNA  
<213> Homo sapiens

<400> 198  
gtatcgacgt agtgggtctcc caagcagtgg gaagaaaacg tgaaccaatt aaaatgtatc 60  
agatacccca aagaaaggcg cttgagtaaa gattccaagt gggtcacaat ctcagatctt 120  
aaaattcagg ctgtcaaaga gatttgctat gaggttgctc tcaatgactt caggcacagt 180  
cggcaggaga ttgaagccct ggccattgtc aagatgaagg agctttgtgc catgtatggc 240  
aagaaagacc ccaatgagcg ggactcctgg agaccactac gtcgatac 288

<210> 199  
<211> 1027  
<212> DNA  
<213> Homo sapiens

<220>  
<221> misc\_feature  
<222> 17, 21, 36, 39, 40, 42, 63, 98, 116, 145, 162, 173, 865,  
885, 891, 916, 924, 927, 929, 934, 942, 949, 976, 983, 988,  
989, 1009, 1014  
<223> n = A,T,C or G

<400> 199  
gctttttggg aaaaacncaa ntgggggaaa gggggnttnn tngcaagggg ataaaggggg 60  
aancccaggg tttccccatt cagggaggtg taaaaagncg gccaggggat tgtaanagga 120  
ttcaataata gggggaatgg gccnngaagt tgcaagggtc cngcccgccca tgnccgcggg 180  
atttagtgac attacgacgs tggtaataaa gtgggsccaa waaatatttg tgatgtgatt 240  
tttsgaccag tgaaccatt gwacaggacc tcatctccty tgagatgrta gccataatca 300  
gataaaagrt tagaagtytt tctgcacgtt aacagcatca ttaaattggag tggcatcacc 360  
aatttcaccc tttgttagcc gataccttcc ccttgaaggc attcaattaa gtgaccaatc 420  
gtcatacgag aggggatggc atggggattg atgatgatat cagggggtgat accttcacag 480  
gtgaaaggca tctctcttg tctatactga ataccacaag tacccttttg accatgtcga 540  
ctagcaaatt tgtctccaat ctgtgtwatc cctaacagag cgtaccctta ttttcaaaaa 600  
tttatatcct tcttgattga gagttaccat aacctgatcc acaatgcccg tctcgctwgt 660  
tctgagaaaa gtgctacagt ctctcttggt atagcgtcta ttggtgctct ccaattcatc 720  
ttcatttttc aggcaagggt aactgttttg cctataataa cmtcatctcc tgatacmcg 780  
aaccckkgga rctatcaaac catcatcatc cagcgttckt watgtymcta aatccctatt 840  
gcggccgcct gcagggtcaac atatnggaaa accccccacc ccttnggagc ntaccttgaa 900  
ttttccatat gtcccntaaa ttancctngnc ttancctggc cntaacctnt tccgggttaa 960  
attgtttccg ccccntttcc ccnccttnna accggaaacc ttaattttna accnggggtt 1020  
cctatcc 1027

<210> 200  
<211> 207  
<212> DNA  
<213> Homo sapiens

<400> 200  
agtgacatta cgacgctggc catcttgaat cctagggcat gaagttgccc caaagttcag 60  
cacttggtta agcctgatcc ctctggttta tcacaaagaa taggatggga taaagaaagt 120  
ggacacttaa ataagctata aattatatgg tcttgttcta gcaggagaca actgcacagg 180  
tatactacca gcgtcgtaat gtcacta 207

<210> 201

<210> 205  
<211> 505







<212> DNA  
<213> Homo sapiens

<220>  
<221> misc\_feature  
<222> 552, 630, 649, 657, 691, 693, 697  
<223> n = A,T,C or G

<400> 213  
tcgggtgatg cctcctcagg catcttccat ccatctcttc aagattagct gtcccaaagt 60  
tttttccttc tcttctttac tgataaattt ggactccttc ttgacactga tgacagcttt 120  
agtatccttc ttgtcacctt gcagacttta aacataaaaa tactcattgg ttttaaaagg 180  
aaaaaagtat acattagcac tattaagctt ggccttgaaa catcttctat cttttattaa 240  
atgtcgggta gctgaacaga attcatctta caatgcagag tgagaaaaga agggagctat 300  
atgcatttga gaatgcaagc attgtcaaat aaacatttta aatgctttct taaagtgagc 360  
acatacagaa atacattaag atattagaaa gtgtttttgc ttgtgtacta ctaattaggg 420  
aagcaccttg tatagttcct cttctaaaaat tgaagtagat tttaaaaacc catgtaattt 480  
aattgagctc tcagttcaga ttttaggaga attttaacag ggatttggtt ttgtctaaat 540  
tttgtcaatt tntttagtta atctgtataa ttttataaat gtcaaactgt atttagtccg 600  
ttttcatgct gctatgaaag aaatacccan gacagggtta tttataaang gaaagangtt 660  
aatttgactc ccagttcaca ggcctgagga ngnatcnccc gaaatcctta ttgcg 715

<210> 214  
<211> 345  
<212> DNA  
<213> Homo sapiens

<220>  
<221> misc\_feature  
<222> 6, 8, 15  
<223> n = A,T,C or G

<400> 214  
ggtaangngc atacntcggg gctccggccg ccggagtcgg gggattcggg tgatgcctcc 60  
tcaggcccac ttgggcctgc ttttcccaaa tggcagctcc tctggacatg ccattccttc 120  
tcccacctgc ctgattcttc atatgttggg tgtccctggt tttctgggtc tatttcctga 180  
ctgctgttca gctgccactg tcctgcaaag cctgcctttt taaatgcctc accattcctt 240  
catttgtttc ttaaataatg gaagtgaag tgccacctga ggccgggcac agtggctcac 300  
gcctgtaatc ccagcacttt gggagcctga ggaggcatca cccga 345

<210> 215  
<211> 429  
<212> DNA  
<213> Homo sapiens

<400> 215  
ggatgatgct cctcaggcga agctcaggga ggacagaaac ctcccgtgga gcagaagggc 60  
aaaagctcgc ttgatcttga ttttcagtac gaatacagac cgtgaaagcg gggcctcacg 120  
atccttctga ccttttgggt ttttaagcagg aggtgtcaga aaagttacca cagggataac 180  
tggcttgttg cggccaagcg ttcatagcga cgtcgctttt tgatccttcg atgtcggctc 240  
ttcctatcat tgtgaagcag aattcaccaa gcgttggatt gttcacccac taatagggaa 300  
cgtgagctgg gtttagaccg tcgtgagaca ggtagtattt accctactga tgatgtgtkg 360  
ttgccatggt aatcctgctc agtacgagag gaaccgcagg ttcasacatt tgggtgatgt 420  
gcttgccctt 429

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<221> misc\_feature  
 <222> 49, 216, 265, 275, 281, 296, 371, 407, 424, 429, 454, 456,  
 458, 464, 474, 476, 506, 509, 527, 530  
 <223> n = A,T,C or G

<400> 219  
 tgacgcttgg ccacttgaca caagtagggg ataaggacaa agacccatna ggtggcctgt 60  
 cagccttttg ttactgttgc ttccctgtca ccacggcccc ctctgtaggg gtgtgctgtg 120  
 ctctgtggac attggtgcat ttccacacat accattctct ttctgcttca cagcagtcct 180  
 gaggcgggag cacacaggac taccttgtca gatgangata atgatgtctg gccaaactcac 240  
 cccccaacct tctcactagt tatangaaga gccangccta naaccttcta tccctgncccc 300  
 ttgccctatg acctcatccc tgttccatgc cctattctga tttctgggtga actttggagc 360  
 agcctggttt ntccctcctca ctccagcctc tctccataacc atgggtanggg ggtgctgttc 420  
 cacncaaang gtcagggtgtg tctggggaat cctnananct gccnggagtt tccnangcat 480  
 tcttaaaaac cttcttgctt aatcanatng tgtccagtgg ccaacntcn 530

<210> 220  
 <211> 531  
 <212> DNA  
 <213> Homo sapiens

<400> 220  
 tgacgcttgg ccacttgaca ctaaatagca tcttctaaag gcctgattca gagttgtgga 60  
 aaattctccc agtgtcaggg attgtcagga acagggtgc tctgtgctc actttacctg 120  
 ctgtgtttct gctggaaaag gaggggaagag gaatggctga tttttacctt atgtctccca 180  
 gtttttcata ttcttcttgg atcctcttct ctgacaactg ttcccttttg gtcttcttct 240  
 tcttgctcag agagcaggtc tctttaaaac tgagaaggga gaatgagcaa atgattaaag 300  
 aaaacacact tctgaggccc agagatcaaa tattaggtaa atactaaacc gcttgccctgc 360  
 tgtggctact tttctcctct ttccatgct ctatccctct atccccacc tattcatatg 420  
 gcttttatct gccaaagtat ccggcctctc atcaaccttc tcccctagcc tactggggga 480  
 tatccatctg ggtctgtctc tgggtgtattg gtgtcaagtg gccaaagcgtc a 531

<210> 221  
 <211> 530  
 <212> DNA  
 <213> Homo sapiens

<400> 221  
 attgacgctt ggccacttga caccgcctg cctgcaatac tggggcaagg gccttcaactg 60  
 ctttctctgcc accagctgcc actgcacaca gagatcagaa atgctaccaa ccaagactgt 120  
 tggctctcag cctctctgag gagaaagagc agaagcctgg aagtcagaag agaagctaga 180  
 tcggctacgg ccttggcagc cagcttcccc acctgtggca ataaagtcgt gcatggctta 240  
 acaatggggg cacctcctga gaaacacatt gttaggcaat tcggcgtgtg ttcatcagag 300  
 catatttaca caaacctcga tagtgagcc tactatccac tattgctcct acgctgcaaa 360  
 cctgaacagc atgggactgt actgaatact ggaagcagct ggtgatggta cttatttgtg 420  
 tatctaaaca cagagaaggt acagtaagaa tatggtatca taaacttaca gggaccgcca 480  
 tcctatatgc agtctgttgt gacaaaaatg tgtcaagtgg ccaagcgtca 530

<210> 222  
 <211> 578  
 <212> DNA  
 <213> Homo sapiens

<220>

<221> misc\_feature  
 <222> 308, 381, 561, 570, 573  
 <223> n = A,T,C or G

<400> 222  
 tgtatcgacg tagtggtctc cgggctacta ggccgttggtg tgctggtagt acctggttca 60  
 ctgaaaggcg catctccctc cccgcgtcgc cctgaagcag ggggaggact tcgcccagcc 120  
 aaggcagttg tatgagtttt agctgcggca cttcgagacc tctgagccca cctccttcag 180  
 gagccttccc cgattaagga agccagggtg aggattcctt cctccccag acaccacgaa 240  
 caaaccacca cccccctat tctggcagcc catatacatc agaacgaaac aaaaataaca 300  
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 ctttagcctg tcagctccta nagggcaggg accgtgtctt ccgaatgggc tgtgcagcgc 420  
 cgactgcggg aagtatcgga ggaggaagca gagtcagcag aagttgaacg gtgggcccgg 480  
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 gtttgccttt tggagtggga naccactacn tcnatata 578

<210> 223  
 <211> 578  
 <212> DNA  
 <213> Homo sapiens

<400> 223  
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 gtcactgttt catttgattc ctagaagggt agtcttagat atgttacttt aacctgtatg 180  
 ctgtagtgct ttgaatgcat tttttgtttg cttttttgtt tgcccaacct gtcaattata 240  
 gctgcttagg tctggactgt cctggataaa gctgttaaaa tattcaccag tccagccatc 300  
 ttacaagcta attaagtcaa ctaaagtctt ccttggtttg ccagacttgt tatgtcaatc 360  
 ctcaatttct gggttcattt tgggtgccct aaatcttagg gtgtgacttt cttagcatcc 420  
 tgtaacatcc attcccaagc aagcacaact tcacataata ctttccagaa gttcattgct 480  
 gaagcctttc cttcaccag cgagcaact tgattttcta caacttcctt catcagagcc 540  
 acaagagtat gggatatgga gaccactacg tcgataca 578

<210> 224  
 <211> 345  
 <212> DNA  
 <213> Homo sapiens

<220>  
 <221> misc\_feature  
 <222> 13  
 <223> n = A,T,C or G

<400> 224  
 tgtatcgacg tantggtctc ccaaggtgct gggattgcag gcatgagcca ccactcccag 60  
 gtggatcttt ttctttatac ttacttcatt aggtttctgt tattcaagaa gtgtagtggt 120  
 aaaagtcttt tcaatctaca tggttaaata atgatatgctt gggaaataaa tagaaatttt 180  
 ttctttcatc tttaggttga ataaagaaac agaaaaata gaacatactg aaaataatct 240  
 aagttccaac catagaagaa ctgcagaaga aatgaagaaa gtgatgatga tttagatttt 300  
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<210> 225  
 <211> 347  
 <212> DNA

695440-69574

gggaaacact	tctctccagc	cttgtaagg	ttggagccct	ctccagtata	tgtctcgaaa	60
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gaccctcagc	cggtctcggt	cgccctgtac	tgcctctctc	tgaagaagag	gagagtctcc	420
ctcaccagct	cccaccgcct	taaaaccagc	ctactccctt	aggggtactcc	catgtctcct	480
cgctatgtc	cctctgaggc	tcatcaccca	ttgcctcttg	gttgcaaccg	tgggtggagg	540
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cccccttct	ggtttatgtc	ccttctttct	acttctga	tgtataattg	gaaaacccat	660
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tgcactggca	gccccgaaa	atagccatgc	tcttaatttg	gcatttgttg	ctcaggcagc	1140
cccagatagt	aaaaggaaac	tccaaaaact	agagggattt	tgctggaatg	aataaccagtc	1200
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```

cagctcaggc agctgaaaaa agccactgat aaagcatcct ggagtatcag agtttactgt 1320
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tacagtctac caccatttta ggaggagcaa agctacctca gctcctccgg agccgtttta 2100
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```

```

<210> 228
<211> 419
<212> DNA
<213> Homo sapiens

```

```

<220>
<221> misc_feature
<222> 402
<223> n = A,T,C or G

```

```

<400> 228
taagagggtg caagatctaa gcacagccgt caatgcagaa cacagaacgt agcctggtaa 60
gtgtgtaag agtgggaatt tttggagtac agagtaaggc acctaaccct agctgggggt 120

```

tgggtgacggt cccagatggc ttacagaaga aagtgtcctg agatgagttt ttaagaatga 180  
 ataaggatag acacaagtga ggactgactt ggcagtgggt aatgggtgggt ggcaaaaaaac 240  
 ttcgcatgta tggaaactgc acgtacagga atgaagaatg agactgtgtg gtgttttaatg 300  
 agctgcaaat actaatTTTA tcctgaaagt ttTgaagagt taactaaaaa gtatTTTTTA 360  
 gtaaggaaat aaccctacat ttcagggtta ttgtttgttt anatattgaa ggtgcccaa 419

<210> 229  
 <211> 148  
 <212> DNA  
 <213> Homo sapiens

<400> 229  
 aagaggggtac ctgtatgtag ccatgggtggc aatgagagac tgattactac ctgctggaga 60  
 ttgtTTAagt gagTTaatat attaaggata aagggagcca ggTTTTTtga ctgttggaga 120  
 aggaaattac agatattgaa ggtcccaa 148

<210> 230  
 <211> 257  
 <212> DNA  
 <213> Homo sapiens

<400> 230  
 taagagggta cmaaaaaaaaa aaaatagaac gaatgagtaa gacctactat ttgatagtag 60  
 aacaggggtga ctatagtcaa tgataactta attatacatt taacatagag tgtaattgga 120  
 ttgttttTga ctcgaaggat aaatgcttga gaggatggat accccattct ccatgatgta 180  
 cttattttcac attacatgcc tgtatcaaag catctcatat accctataaa tatgtacacc 240  
 tactatgtac cctctta 257

<210> 231  
 <211> 260  
 <212> DNA  
 <213> Homo sapiens

<400> 231  
 taagagggta cgggtatttg ctgatgggat ttttttttct ttctttttct ttggaaaaca 60  
 aaatgaaagc cagaacaaaa ttattgaaca aaagacaggg actaaatctg gagaaatgaa 120  
 gtccctcac ctgactgcc tttcattcta tctgaccttc cagtctaggt taggagaata 180  
 ggggggtggag gggattaatc tgatacaggt atattttaaag caactctgca tgtgtgccag 240  
 aagtccatgg taccctctta 260

<210> 232  
 <211> 596  
 <212> DNA  
 <213> Homo sapiens

<220>  
 <221> misc\_feature  
 <222> 437, 440, 461, 536, 541, 565, 580, 587, 590, 595  
 <223> n = A,T,C or G

<400> 232  
 tgctcctctt gccttaccaa ccacaaatta gaaccataat gagatgtcac ctcatacctg 60  
 gtgggattaa cattatttaa aaaatcagaa gtattgacaa ggatgtgaag aaattagaac 120  
 atctgtgcac tgttgggtggg aatgtaaaaa aggtgtggcc actatgggta acagcatgaa 180



```

ggttcctcaa aaaaaatttt ttttaattcta ctctatgatc gatcttgagg ttgtttatgc 240
aaaagaactg aaatcaggat tttgaggaaa tattcacatt cccacatcca tttctgcttt 300
attcataata ctcaagagat ggaaacaacc taaatgtcca tcccgggatg aatggataaa 360
cacagtgtgg tatatgcata caatggaata ttatttagtc tttaaaaaga aaaatttctat 420
catatactac aacttanatn aaccttgagg acacaatgct nagtgaaata agccacggaa 480
ggacgaatac tgcattattc ccttatatga agtatctaaa gtggtcaaac tcttanagca 540
naaagtaaaa atgggtggtt gccanacagt tggttaggcn agaaganaan cctant 596

```

<210> 233

<211> 96

<212> DNA

<213> Homo sapiens

<400> 233

```

tcttctgaag accttttcgcg actcttaagc tcgtggttgg taaggcaaga ggagcgttgg 60
taaggcaaga ggagcgttgg taaggcaaga ggagca 96

```

<210> 234

<211> 313

<212> DNA

<213> Homo sapiens

<400> 234

```

tgtaagtcga gcagtgtgat gataaaactt gaatggatca atagttgctt cttatggatg 60
agcaaagaaa gtagtttctt gtgatggaat ctgctcctgg caaaaatgct gtgaacgttg 120
ttgaaaagac aacaaagagt ttagagtagt acataaattt agaatagtag ataaacttag 180
aatagtacat aaacttagta cataaataat gcacgaagca ggggcagggc ttgagagaat 240
tgacttcaat ttggaaagag tatctactgt aggttagatg ctctcaaaca gcatcacact 300
gctcgaactta caa 313

```

<210> 235

<211> 550

<212> DNA

<213> Homo sapiens

<400> 235

```

aacgaggaca gatccttaaa aagaatgttg agtgaaaaaa gtagaaaata agataatctc 60
caaagtccag tagcattatt taaacatttt taaaaaatac actgataaaa attttgtaca 120
tttcccaaaa atacatatgg aagcacagca gcatgaatgc ctatgggrtt gaggataggg 180
gttggggagta gggatgggga taaaggggga aaataaaacc agagaggagt cttacacatt 240
tcatgaacca aggagtataa ttatttcaac tatttgtacc wgaagtccag aaagagtgga 300
ggcagaaggg ggagaagagg gcgaagaaac gtttttggga gaggggtccc asaagagaga 360
ttttcgcgat gtggcgctac atacgttttt ccaggatgcc ttaagctctg caccctattt 420
ttctcatcac taatattaga ttaaaccctt tgaagacagc gtctgtggtt tctctacttc 480
agctttccct ccgtgtcttg cacacagtag ctgttttaca agggttgaac tgactgaagt 540
gagattattc 550

```

<210> 236

<211> 325

<212> DNA

<213> Homo sapiens

<400> 236

```

tagactgact catgtcccct accagagtag ctagaattaa tagcacaagc ctctacaccc 60

```

```

aggaactcac tattgaatac ataaatggaa tttattcagc cttaaaaagt ttggaaggaa 120
attctgacat atgctaaaac atggatgaac cttgaagact ttatgataag taaaagaagc 180
cagtcataaa aggaaaaata ttgcatgatt ccacttatat gaggtaccta gagtagtcaa 240
tttcatagaa acacaaaata gaatggtgtt tgccagggtc tttgaggaaa agggaatgac 300
aagttagggg acatgagtca gtcta 325

```

```

<210> 237
<211> 373
<212> DNA
<213> Homo sapiens

```

```

<220>
<221> misc_feature
<222> 355
<223> n = A,T,C or G

```

```

<400> 237
tagactgact catgtccctt atctactcaa catttccact tgaagtctga taggcatctc 60
agacttatct tgtcccaaag caaactcttt atttcttttc atcctagtct ttatttcttg 120
tgctgtctta cccatctcaa aagagtgcc aatccacca agttgctgaa acagaaatct 180
aagaaatata cttgattctt ctttttccca tctacttcac ttctaattca ttagtaaata 240
atctgtttca gaaaaccaa cacctcatgt tctactcat aagggggagt tgaacaatga 300
gaacacacag acacagggag gggaacatca cacaccacgg cccgtcaggg agtangggac 360
atgagtcagt cta 373

```

```

<210> 238
<211> 492
<212> DNA
<213> Homo sapiens

```

```

<220>
<221> misc_feature
<222> 272, 310, 380, 435, 474, 484, 488
<223> n = A,T,C or G

```

```

<400> 238
tagactgact catgtccctt ataatgctcc caggcatcag aaagcatctc aaactggagc 60
tgacaccatg gcagagggtt caggtaagtc acaaaagggg tcctaaagaa tttgccctca 120
atatcagagt gattagaaga agtggacaga gctacccaag ttaaacaatg gcgagataaa 180
aaaaatatgg cacttgtgaa cacacactac aggaggaaaa taagggaacat aatagcatat 240
tgtgctatta tgatgatgaa gaacctctct anaagaaaac ataaccaaag aaacaaagaa 300
aattcctgcn aatgtttaat gctatagaag aaattaacaa aaacatatat tcaatgaatt 360
cagaaaagtt agcagggtcan aagaaaacaa atcaaagacc agaataatcc catttttagat 420
tgtcgagtaa actanaacag aaagaatacc actggaaatt gaattcctac gtangggaca 480
tgantcantc ta 492

```

```

<210> 239
<211> 482
<212> DNA
<213> Homo sapiens

```

```

<220>
<221> misc_feature
<222> 245

```

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<223> n = A,T,C or G

<400> 239

```
tggaaagtat ttaatgatgg gcaacttgct gtttacttcc tacatatccc atcatcttct 60
gtatTTTTTT aaataacttt tttttggatt tttaaagtaa ccttattctg agaggtaaca 120
tggattacat acttctaagc cattaggaga ctctatgtta aacccaaaagg aaatgttact 180
agatcttcat ttgatcaata ggatgtgata atcatcatct ttctgctcta atggaaaagt 240
actanaaaca tggaaaccata atcttagatg aacaacgtta gaatttgcac taattctacg 300
gaatttcagt aattcggcaa atgtcgggca gtgacacaac atttcatgac ggggacgcat 360
ctaccaactt ctggcgataa gggccaccct tccctctgta cttacagtcc catttcatac 420
acagtctttg attaaatatt cacatTTTTT ctctacctaa agaccttcaa gaccagtacg 480
ta 482
```

<210> 240

<211> 519

<212> DNA

<213> Homo sapiens

<220>

<221> misc\_feature

<222> 491

<223> n = A,T,C or G

<400> 240

```
tgtatcgacg tagtgggtctc cccatgtgat agtctgaaat atagcctcat gggatgagag 60
gctgtgcccc agcccgacac ccgtaaaggg tctgtgctga ggtggattag taaaagagga 120
aagccttgca gttgagatag aggaagggca ctgtctcctg cctgcccctg ggaactgaat 180
gtctcggtat aaaaccogat tgtacatttg ttcaattctg agataggaga aaaaccaccc 240
tatggcgggg ggcgagacat gttggcagca atgctgcctt gttatgcttt actccacaga 300
tgtttgggcg gagggaaaca taaatctggc ctacgtgcac atccaggcat agtacctccc 360
tttgaactta attatgacac agattccttt gctcacatgt ttttttgcgt accttctcct 420
tattatcacc ctgctctcct accgcattcc ttgtgctgag ataataaaaa taatatcaat 480
aaaaacttga nggaactcgg agaccactac gtcgatata 519
```

<210> 241

<211> 771

<212> DNA

<213> Homo sapiens

<220>

<221> misc\_feature

<222> 304, 402, 442, 463, 510, 541, 550, 567, 571, 596, 617, 624, 644, 648, 652, 667, 682, 686, 719, 722, 729, 732, 751, 752, 757, 758, 760, 763, 766, 769

<223> n = A,T,C or G

<400> 241

```
tgtatcgacg tagtgggtctc cactcccggc ttgacggggc tgctatctgc cttccaggcc 60
actgtcacgg ctcccgggta gaagtcactt atgagacaca ccagtgtggc cttgttggct 120
tgaagctcct cagaggaggg tgggaacaga gtgaccgagg gggcagcctt gggctgacct 180
aggacgggtc gcttgggtccc tccgccaaac acgagagtgc tgctgcttgt atatgagctg 240
cagtaataat cagcctcgtc ctacgcctgg agcccagaga tggtcaggga ggccgtgttg 300
ccanacttgg agccagagaa gcgattagaa acccctgagg gccgattacc gacctcataa 360
atcatgaatt tggggggcttt gcctgggtgc tgttgggtacc angagacatt attataacca 420
```

```

ccaacgtcac tgctggttcc antgcaggga aaatggttga tcnaactgtc caagaaaacc 480
actacgtcca taccaatcca ctaattgccn gccgcctgca gggtcaacca tattggggaa 540
naactcccn cccgccgttg ggattgncat naacctttga aattttttcc tattanttgt 600
ccccctaaaa taaaccnttg ggcnttaatc cattgggtcc atancntntt tncccggttt 660
ttaaaanttg tttatccgc cncnctatc ccccccaac tttccaaaac ccgaaacct 720
tnaaattnt tnaaacctg gggggttccc nnaattnnan ttnaancntc c 771

```

```

<210> 242
<211> 167
<212> DNA
<213> Homo sapiens

```

```

<400> 242
tgggcacctt caatatcggg ctcatcgata acatcacgt gctgatgctg ctgttctgtg 60
tcctctctag gaacctctgg attttcaaatt tctttgagga attcatccaa attatctgcc 120
tctcctcctt tcctcctttt tctaaggtct tctggtacaa gcggtca 167

```

```

<210> 243
<211> 338
<212> DNA
<213> Homo sapiens

```

```

<400> 243
ttgggcacct tcaatatcta ctgatctaaa tagtgtggtt tgaggcctct tgttcctggc 60
taaaaatcct tggcaagagt caatctccac tttacaatag aggtaaaaat cttacaatgg 120
atattcttga caaagctagc atagagacag caattttaca caaggtattt ttcacctgtt 180
taataacagt ggttttccta caccataggt gtgccaccaa gggaggagtg cacagttgca 240
gaaacaaatt aagatactga agacaacact acttaccatt tcccgtatag ctaaccacca 300
gttcaactgt acatgtatgt tcttatgggc aatcaaga 338

```

```

<210> 244
<211> 346
<212> DNA
<213> Homo sapiens

```

```

<400> 244
tttttggtc ccatacagca cactctcatg ggaaatgtct gttctaaggt caaccataa 60
tgcaaaaatc atcaatatac ttgaagatcc ccgtgtaagg tacaatgtat ttaatattat 120
cactgataca attgatccaa taccagtttt agtctggcat tgaatcaaat cactgttttt 180
gttgataaaa aagagaaata tttagcttat atttaagtac catattgtaa gaaaaaagat 240
gcttatcttt acatgctaaa atcatgatct gtacattggt gcagtgaata ttactgtaaa 300
agggaagaag gaatgaagac gagctaagga tattgaaggt gcccaa 346

```

```

<210> 245
<211> 521
<212> DNA
<213> Homo sapiens

```

```

<220>
<221> misc_feature
<222> 252, 337, 434, 455, 466, 478, 494, 510, 516
<223> n = A,T,C or G

```

```

<400> 245

```

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accaatccca cacggatact gagggacaag tatatcatcc catttcatcc ctacagcagc 60
aacttcatga ggcaggaggt attagtccca ttttacagaa gaggaaactg agacttaggg 120
agatcaagta atttgcccag gtcgcacaat tagtgataga gccagggctt gaagcgacgt 180
ctgtcttaag ccaatgaccc ctgcagatta ttagagcaac tgttctccac aacagtgtaa 240
gcctcttgct anaagctcag gtccacaagg gcagagatgt ttgtctgttt tgctcattgc 300
tccttcccca ttgcttagag cagggtctgc cacgaancag gttctcaatg catagtattt 360
aaatgtatat aagagcaaac atatgttaca gagaactttc tgtatgcttg tcacttacat 420
gaatcacctg tganatgggt atgcttggtc cccantgttg cagatnaaga tattgaangt 480
gcccaaatca ctanttgcgg gcgcctgcan gtccancata t 521

```

<210> 246

<211> 482

<212> DNA

<213> Homo sapiens

<220>

<221> misc\_feature

<222> 464

<223> n = A,T,C or G

<400> 246

```

tggaaccaat ccaaatatccc atcaatgata gactggataa agaaaatttg gcacatgttc 60
accatgaaat actatgcagc cataaaaaag gatgagttca tatcctttgc agggacatgg 120
atgaagctgg agaccatcat tctcagcaaa ctaacaaggg aacagaaaac caaacactgc 180
atgttctcac tcttaagtgg gagctgaaca atgagaacac atggacacag ggaggggaac 240
atcacacagt ggggcctgct ggtgggtagg ggtctagggg agggatagca ttaggagaaa 300
tacctaattg agatgacggg ttgatgggtg cagcaaacca ccatgacacg tgtataccta 360
tgtaacaaac ctgcatgttc tgcacatgta cccagaact taaagtgtta ataaaaaat 420
taagaaaaaa gttaagtatg tcatagatac ataaaatatt gtanatattg aagggtgcccc 480
aa 482

```

<210> 247

<211> 474

<212> DNA

<213> Homo sapiens

<220>

<221> misc\_feature

<222> 220, 255, 287, 312, 339, 374, 382, 403, 414, 426, 427, 428, 432, 433, 434, 435, 436, 465

<223> n = A,T,C or G

<400> 247

```

ttcgatacag gcacagagta agcagaaaaa tggctgtggt ttaaccaagt gagtacagtt 60
aagtgaagaga ggggcagaga agacaagggc atatgcaggg ggtgattata acagggtggtt 120
gtgctgggaa gtgagggtac tcggggatga ggaacagtga aaaagtggca aaaagtggta 180
agatcagtga attgtacttc tccagaattt gatcttctggn ggagtcaaat aactatccag 240
tttggggtat catanggcaa cagttgaggt ataggaggta gaagtcncag tgggataatt 300
gaggttatga anggtttggt actgactggt actgacaang tctgggttat gaccatggga 360
atgaatgact gtanaagcgt anaggatgaa actattccac ganaaagggg tccnaaaact 420
aaaaannnaa gnnnnnnggg aatattattt atgtggatat tgaangtgcc caaa 474

```

<210> 248

<211> 355

<212> DNA  
<213> Homo sapiens

<220>  
<221> misc\_feature  
<222> 69, 87, 186, 192, 220, 227, 251, 278, 339, 346, 350  
<223> n = A,T,C or G

<400> 248  
ttcgatacag gcaaacatga actgcaggag ggtggtgacg atcatgatgt tgccgatggt 60  
ccgatggnc acgaagacgc actggancac gtgcttacgt ccttttgctc tgttgatggc 120  
cctgagggga cgcaggaccc ttatgaccct cagaatcttc acaacgggag atggcactgg 180  
attgantccc antgacacca gagacacccc aaccaccagn atatcantat attgatgtag 240  
ttcctgtaga nggccccctt gtggaggaaa gctccatnag ttggtcatct tcaacaggat 300  
ctcaacagtt tccgatggct gtgatgggca tagtcatant taaccntgtn tcgaa 355

<210> 249  
<211> 434  
<212> DNA  
<213> Homo sapiens

<400> 249  
ttggattggt cctccaggag aacaagggga aaaagggtgac cgagggctcc ctggaactca 60  
aggatctcca ggagcaaaag gggatggggg aattcctggt cctgctggtc ccttaggtcc 120  
acctggtcct ccaggcttac caggctcctca aggcccaaag ggtaacaaag gctctactgg 180  
acccgctggc cagaaagggtg acagtgggtct tccagggcct cctgggcctc cagggtccacc 240  
tggtgaagtc attcagcctt taccaatctt gtcctccaaa aaaacgagaa gacatactga 300  
aggcatgcaa gcagatgcag atgataatat tcttgattac tcggatggaa tggaagaaat 360  
at ttgggttcc ctcaattccc tgaaacaaga catcgagcat atgaaatttc caatgggtac 420  
tcagaccaat ccaa 434

<210> 250  
<211> 430  
<212> DNA  
<213> Homo sapiens

<220>  
<221> misc\_feature  
<222> 301, 430  
<223> n = A,T,C or G

<400> 250  
tggattggtc acatggcaga gacaggattc caaggcagtg agaggaggat acaatgcttc 60  
tcactagtta ttattattta ttttattttt gagatgaagt ctgctttgt ctcccaggct 120  
ggagagcggg ggtgcgatct tggctctctg caacccccgc ctcaagcaat tctcctgtct 180  
tagcctcgcg ggtagatgga attacaggcg cccaccgcc a tgcccaacta atttttttgt 240  
gtcttcagta gagacagggt ttcgccatgt tgggcaggct ggtcttgaac tcctgacctc 300  
nagtgatctg ccctcctcgg cctcacaaag tgctggaatt acaggcatgg gctgctgcac 360  
ccagtcaact tctcactagt tatggcctta tcattttcac cacattctat tggcccaaaa 420  
aaaaaaaaan 430

<210> 251  
<211> 329  
<212> DNA

TCAGACCAAT CCAA

<213> Homo sapiens

<400> 251

```

tgggtactcca ccatyatggg gtcaaccgcc atcctcgccc tcctcctggc tggttctccaa 60
ggagtctgtg ccgaggtgca gctgrtgag tctggagcag aggtgaaaaa gtccggggag 120
tctctgaaga tctcctgtaa ggggttctgga tacaccttta agatctactg gatcgccctgg 180
gtgcgccagt tgcccgggaa aggcctggag tggatggggc tcatctttcc tgatgactct 240
gataccagat acagcccgtc cttccaaggc caggtcacca tctcagtcga taagtccatc 300
agcaccgcct atctgcagtg gagtaccaa
329

```

<210> 252

<211> 536

<212> DNA

<213> Homo sapiens

<400> 252

```

tgggtactcca ctcagcccaa ccttaattaa gaattaagag ggaacctatt actattctcc 60
caggctcctc tgctctaacc aggccttctgg gacagtatta gaaaaggatg tctcaacaag 120
tatgtagatc ctgtactggc ctaagaagtt aaactgagaa tagcataaat cagaccaaac 180
ttaatgggtc ttgagacttg tgcctggag cagctgggat aggaaaactt ttgggcagca 240
agaggaagaa ctgcctggaa gggggcatca tgttaaaaaa tacaagggga acccacacca 300
ggcccccttc ccagctctca gcctagagta ttagcatttc tcagctagag actcacaact 360
tccttgctta gaatgtgcca ccggggggag tccctgtggg tgatgaggct ctcaagagt 420
agagtggcat cctatcttct gtgtgcccac aggagcctgg cccgagactt agcaggtgaa 480
gtttctggtc caggctttgc ccttgactca ctatgtgacc tctggtggag taccaa 536

```

<210> 253

<211> 507

<212> DNA

<213> Homo sapiens

<220>

<221> misc\_feature

<222> 1

<223> n = A,T,C or G

<400> 253

```

ntgttgcat cccagtaact cggaagctg aggcgggagg atcacctgag ctcaggaggt 60
tgaggccgca gtgagccggg accacgccac tacactccag cctggggcat agagtgagac 120
cctccaagac agaaaagaaa agaaaggaag ggaaagggaa agggaaaagg aaaaggaaaa 180
ggaaaaggaa aaggaaaaga caagacaaaa caagacttga atttgatct cctgacttca 240
attttatgtt ctttctacac cacaattcct ctgcttacta agatgataat ttagaaaccc 300
ctcgttccat tctttacagc aagctggaag tttggtcaag taattacaat aatagtaaca 360
aatttgaata ttatatgcca ggtgtttttc attcctgctc tcacttaatt ctcaccactc 420
tgatataaat acaattgctg ccgggtgtgg tggctcatgc ctgtaatccc ggcactttgg 480
gagaccgagg tgggcggats gcaacaa
507

```

<210> 254

<211> 222

<212> DNA

<213> Homo sapiens

<220>

<221> misc\_feature

<222> 167

<223> n = A,T,C or G

<400> 254

```
ttggattggt cactgtgagg aagccaaatc ggatccgaga gtctttttct aaaggccagt 60
actggccaca ctttctcctg ccgccttcct caaagctgaa gacacacaga gcaaggcgct 120
tctgttttac tccccaatgg taactccaaa ccatagatgg ttagctnccc tgctcatctt 180
tccacatccc tgctattcag tatagtccgt ggaccaatcc aa 222
```

<210> 255

<211> 463

<212> DNA

<213> Homo sapiens

<400> 255

```
tgttgcgata cataaatgct gaaatggaaa taaacaacat gatgagggag gattaagttg 60
gggaggggagc acattaaggt ggccatgaag tttgttggaa gaagtgactt ttgaacaagg 120
ccttggtggtt aagagctgat gagagtgtcc cagacagagg ggccactggt acaatagacg 180
agatgggaga gggcttggaa ggtgtgcgaa atagggaagg gtttgttctg gtatgagtct 240
agtgaacaca gaggcgagag gccctggtgg gtgcagctgg agagtatatgc agaataacat 300
taggccctgt gggggactgt agactgtcag caataatcca cagtttggat tttattctaa 360
gagtgatggg aagccgtgga aaggggggta agcaaggagt gaaattatca gatttacagt 420
gataaaaata aattgggtctg gctactgggg aaaaaaaaaa aaa 463
```

<210> 256

<211> 262

<212> DNA

<213> Homo sapiens

<400> 256

```
ttggattggt caacctgctc aactctacyt ttctctcttc ttcttaaaaa attaataaat 60
ccaatacatt aatgccaaaa cccttgggtt ttatcaatat ttctgttaaa aagtattatc 120
cagaactgga cataatacta cataataata cataacaacc ccttcatctg gatgcaaaca 180
tctattaata tagcttaaga tcactttcac ttacagaag caacatcctg ttgatgttat 240
tttgatgttt ggaccaatcc aa 262
```

<210> 257

<211> 461

<212> DNA

<213> Homo sapiens

<220>

<221> misc\_feature

<222> 2, 5, 6, 7, 8, 9, 10, 11, 12, 13, 25, 32, 38, 71, 72

<223> n = A,T,C or G

<400> 257

```
gnggnnnnnn nnncaattcg actcngttcc cntggtancc ggtcgacatg gccgcgggat 60
taccgcttgt nnctgggggt gtatggggga ctatgaccgc ttgtagctgg ggggtgatgg 120
gggactatga ccgctttagt mtggkggtgt atgggggact atgaccgctt gtcgggtggt 180
cggataaacc gacgcaaggg acgtgatcga agctgcgttc ccgctctttc gcatcggtag 240
ggatcatgga cagcaatatc cgcattcgyc tgaaggcggt cgaccatcgc gtgctcgatc 300
aggcgaccgg cgacatcgcc gacaccgcac gccgtaccgg cgcgctcatc cgcgggccga 360
tcccgccttc cgcgcgcatc gagaagttca cgggtcaaccg tggcccgcac gtcgacaaga 420
```



agtcgcgcga gcagttcgag gtgcgtacct acaagcggc a

461

<210> 258

<211> 332

<212> DNA

<213> Homo sapiens

<220>

<221> misc\_feature

<222> 251

<223> n = A,T,C or G

<400> 258

tgaccgcttg tagctggggg tgtatggggg actacgaccg cttgtagctg ggggtgtatg 60  
ggggactatg accgcttgta gctgggggtg tatgggggac tatgaccgct ttagctggg 120  
ggtgtatggg ggactaggac cgctttagc tgggggtgta tgggggacta tgaccgcttg 180  
tagctggggg tgtatggggg actacgaccg cttgtagctg ggggtgtatg ggggactatg 240  
accgcttgta nctgggggtg tatgggggac tatgaccgct tgtgctgcct gggggatggg 300  
aggagagttg tggttgggga aaaaaaaaaa aa 332

<210> 259

<211> 291

<212> DNA

<213> Homo sapiens

<220>

<221> misc\_feature

<222> 141, 144, 167, 168, 171, 175, 194, 201, 202, 205, 209, 212,  
235, 236, 245, 246, 258, 266, 268, 270, 273, 277, 285, 290

<223> n = A,T,C or G

<400> 259

taccgcttgt gaccgcttgt gaccgcttgt gaccgcttgt gaccgcttgt gaccgcttgt 60  
gaccgcttgt gaccgcttgt gaccgcttgt gaccgcttgt gaccgcttgt gaccgcttgt 120  
gaccgcttgt gaccgcttgt nacngggggg gtctggggga ctatgannga ntgtnactgg 180  
gggtgtcttg gggncatga nngantgtna cnggggggtg ctgggggact atganngact 240  
gtgcnnctg ggggatcnga ggagantngn ggntagngat ggttngggan a 291

<210> 260

<211> 238

<212> DNA

<213> Homo sapiens

<400> 260

taagagggta ctgggttaaaa tacaggaaat ctggggtaat gaggcagaga accaggatac 60  
tttgaggtca gggatgaaaa ctagaatttt tttctttttt tttgcctgag aaacttgctg 120  
ctctgaagag gcccatgtat taattgcttt gatcttcctt ttcttacagc cctttcaagg 180  
gcagagccct ccttatcctg aaggaatctt atccttagct atagtatgta ccctctta 238

<210> 261

<211> 746

<212> DNA

<213> Homo sapiens

TCAGTTCGAG GTGCGTACCT ACAAGCGGTC A

<220>  
 <221> misc\_feature  
 <222> 662, 680, 685, 698, 707, 709, 734, 740, 741  
 <223> n = A,T,C or G

<400> 261  
 ttgggcacct tcaatatcaa tagctaacat ttattgagtg tttatcgtat cataaaacac 60  
 tgttctaagc ctttaaacgt actaattcat ttaatgctca taatcacttt agaaggtggg 120  
 tactagtatt agtctcattt acagatgcaa catgcaggca cagagagggt aattaacttg 180  
 cccaaggtaa cacagctaag aaatagaaaa aatattgaat ctggaaagtt gggcttctgg 240  
 gtaaccaca gagtcttcaa tgagcctggg gcctcactca gtttgctttt acaaagcgaa 300  
 tgagtaacat cacttaattc agtgagtagg ccaaattggag gtcagctacg agtttctgct 360  
 gttcttgagc tggactgaca gatgtttaca acgtctggcc atcagtwaat ggactgatta 420  
 tcattgggaw gtgggtgggc tgaatgttgg ccagtgaagt ttattcawgc catattttta 480  
 tgtttaggat gacttttggc tggctcctagg gcaagctctg tctgscacgg aacacagaat 540  
 wacacaggga cccctcaat ttctggtgtg gctagaacca tgaaccactg gttgggggaa 600  
 caagcgggtca aaacctaaagt gcggccggct ggcagggtcc acccatatgg ggaaaactcc 660  
 cnacgcgttt ggaatgcctn agctngaatt attctaanag ttgtccnct aaaattagcc 720  
 tgggcgttaa tcanggtcn naagcc 746

<210> 262  
 <211> 588  
 <212> DNA  
 <213> Homo sapiens

<220>  
 <221> misc\_feature  
 <222> 485, 488, 489, 492, 493, 494, 496, 497, 498, 499, 502, 503,  
 504, 506, 521, 537, 550, 564  
 <223> n = A,T,C or G

<400> 262  
 tgaccgcttg tcatctcaca tggggctcctg cacgcttttg cctttgtagg aaacctgaca 60  
 tttgtctgtt tcttctttct cttttccttc ccatatcctc ctaatttacg tttgacttgt 120  
 ttgctgagga ggcaggagct agagactgct gtgagctcat aggggtggga agtttatcct 180  
 tcaagtcccg cccactcatc actgcttctc acctccctt gaccaggctt acaagtgggt 240  
 tcttgccctgc tttccctttg gacccaacaa gccctgttaa tgagtgtgca tgactctgac 300  
 agctgtggac tcagggtcct tggctacagc tgccatgtaa aatatctcat ccagttctcg 360  
 caaattgtta aaataaccac atttcttaga ttccagtacc caaatcatgt ctttacgaac 420  
 tgctcctcac acccagaagt ggcacaataa ttcttgggga attattactt ttttttttct 480  
 ctctntnnnc gnnngnnnng gnnngnccag gaattaccac nttggaagac ctggccngaa 540  
 ttattatan aggggagccg attntttttc ctaacacaaa gcgggtca 588

<210> 263  
 <211> 730  
 <212> DNA  
 <213> Homo sapiens

<220>  
 <221> misc\_feature  
 <222> 124, 510, 534, 559, 604, 605, 635, 711, 729  
 <223> n = A,T,C or G

<400> 263

```

tttttttttt tttggcctga gcaactgaaa ttatgaaatt tccatatact caaaagagta 60
agactgcaaa aagattaaat gtaaaagttg tcttgatac agtaatgttt aagataccta 120
ttanatttat aaatggaaaa ttagggcatt tggatataca agttgaaaat tcaggagtga 180
ggttgggctg gctgggtata tactgaaaac tgtcagtaca cagatgacat ctaaaaccac 240
aaatctgggt ttatttttagc agtgatatgt gtcactccca caaaagcctt cccaattggc 300
ctcagcatac acaacaagtc acctccccac agccctctac acataaaca attccttagt 360
ttagttcagg aggaaatgcg cccttttcct tccgctctag gtgaccgcaa ggcccagttc 420
tcgtcaccaa gatgttaagg gaagtctgcc aaagaggcat ctgaaaggaa ataaggggaa 480
tgggagtgac cacaaaggaa agccaaggan aaactttgga gaccgtttct aganccctgg 540
catttcacaa caaaactcng gaacaaacct tgtctcatca atcatttaag cccttcgttt 600
ggannagact ttctgaactg ggcgctgaac ataancctca ttgaatgtct tcacagtctc 660
ccagctgaag gcacaccttg ggccagaagg ggaatcttcc aggtcctcaa nacagggctc 720
gccctttgnc 730

```

```

<210> 264
<211> 715
<212> DNA
<213> Homo sapiens

```

```

<220>
<221> misc_feature
<222> 364, 451, 476, 494, 495, 515, 519, 524, 633, 635, 636, 645,
647, 649, 657, 692, 695, 701, 707, 710, 713
<223> n = A,T,C or G

```

```

<400> 264
tttttttttt tttggccagt atgatagtct ctaccactat attgaagctc ttaggtcatt 60
tacacttaat gtggttatag atgctgttga gcttacttct accaccttgc tatttctccc 120
gtctcttttt tgttcctttt ctcttctttt cctcccttat tttataattg aatttttttag 180
gattctattt tatatagatt tatcagctat aacactttgt attcttttgt tttgtggttc 240
ttctgtcatt tcaatgtgca tcttaaactc atcacaaatc attttcaaat aatatcatat 300
aaccttacat ataatgtaag aatctaccac catatatattc catttctccc ttccatccta 360
tgtntgtcat attttttcct ttatatatgt tttaaagaca taatagtata tgggaggttt 420
ttgcttaaaa tgtgatcaat attccttcaa ngaaacgtaa aaattcaaaa taaatntctg 480
tttattctca aatnnaccta atatttccta ccatntctna tacntttcaa gaatctgaag 540
gcattgggtt ttccgggtt aagaacctcc tctaaagcac tctaagcaga attaagtctt 600
ctgggagagg aattctccca agcttgggccc ttнантгта ctccntnang gttaaanttt 660
ggccgggaaa tagaaattcc aagttaacag gntanttttt nttttnttn tcncc 715

```

```

<210> 265
<211> 152
<212> DNA
<213> Homo sapiens

```

```

<400> 265
tttttttttt tttcccaaca caaagcacca ttatctttcc tcacaatttt caacatagtt 60
tgattcccat gaagagggtta tgatttctaa agaaaacatg gctactatac tatcaatcag 120
ggttaaatct tttttttttg agacggagtt ta 152

```

```

<210> 266
<211> 193
<212> DNA
<213> Homo sapiens

```

<220>  
 <221> misc\_feature  
 <222> 180  
 <223> n = A,T,C or G

<400> 266  
 taaactccgt ccccttctta atcaatatgg aggctaccca ctccacatta ctttcttttc 60  
 aagggactgt ttccgtaact gttgtgggta ttacgacca ggcttctaaa cctcttaaaa 120  
 ctccccaatt ctggtgccaa cttggacaac atgctttttt tttttttttt tttttttttt 180  
 gagacggagt tta 193

<210> 267  
 <211> 460  
 <212> DNA  
 <213> Homo sapiens

<400> 267  
 tggtgcatc ccttaagcat ggggtgctatt aaaaaaatgg tggagaagaa aatacctgga 60  
 atttacgtct tatctttaga gattgggaag accctgatgg aggacgtgga gaacagcttc 120  
 ttcttgaatg tcaattccca agtaacaaca gtgtgtcagg cacttgctaa ggatcctaaa 180  
 ttgcagcaag gctacaatgc tatgggattc tcccaggagg gccaatctct gagggcagt 240  
 gctcagagat gcccttcacc tcccatgac aatctgatct cggttggggg acaacatcaa 300  
 ggtgtttttg gactccctcg atgccagga gagagctctc acatctgtga cttcatccga 360  
 aaaacactga atgctggggc gtactccaaa gttgttcagg aacgcctcgt gcaagccgaa 420  
 tactggcatg acccataaaa ggaggatgtg gatcgcaaca 460

<210> 268  
 <211> 533  
 <212> DNA  
 <213> Homo sapiens

<220>  
 <221> misc\_feature  
 <222> 450, 470  
 <223> n = A,T,C or G

<400> 268  
 tggtgcatc cggtgataga atagcgacgt ggtaatgagt gcatggcacg cctccgactt 60  
 accttcgccc gtgggggaccc cgagtacgtc tacggcgctcgc tacccttagag taccctctgg 120  
 acgcccgggc gcgttcgatt taccggaagc gcgagctgca gtgggcttgc gccccgggcc 180  
 aaattctttg gggggtttaa ggccgcgggg aatttgaggt atctctatca gtatgtagcc 240  
 aagttggaac agtcgccatt cccgaaatcg ctttctttga atccgcaccg cctccagcat 300  
 tgcctcattc atcaacctga aggcacgcat aagtgcgggt tgtgtcttca gcagctccac 360  
 tccataacta gcgcgctcga cctcgtcttc gtacgcgcca ggtccgtgcg tgcgaattcc 420  
 caactccggt gagttgcgca tttcaagttn cgaaactgtt cgctccacn atttggcatg 480  
 ttacgcatg acacggaata aactcgtcca gtaccgggaa tgggatcgca aca 533

<210> 269  
 <211> 50  
 <212> DNA  
 <213> Homo sapiens

<400> 269  
 tttttttttt ttgcctgaa ttagctacag atcctcctca caagcgggtca 50

<400> 273  
 tttttttttt ttggcaatca acagggtttaa gtcttcggcc gaagttaatc tcgtgttttt 60  
 ggcaatcaac aggtttaagt cttcggccga agttaatctc gtgttttttg caatcaacag 120

```

gtttaagtct tcggccgaag ttaatctcgt gtttttggca atcaacaggt ttaagtcttc 180
ggccgaagtt aatctcgtgt ttttggcaat caacagggtt aagtcttcgg ccgaagttaa 240
tctcgtgttt ttggcaatca acagggtttaa gtcttcggcc gaagttaatc tcgtgttttt 300
ggcaatcaag aggtttaagt cttcggccga agttaatctc gtgtttttgg caatcaacag 360
gtttaagtct tcggccgaan ttaatctcgt gtttttggca atcaacaggt ttaantcttc 420
ggccgaagtt aatctcgtgt ttttggcaat caana 455

```

```

<210> 274
<211> 461
<212> DNA
<213> Homo sapiens

```

```

<400> 274
tttttttttt ttggccaata cccttgatga acatcaatgt gaaaatcctc ggtaaaatac 60
tggcaaacca aatccagcag cacatcaaaa agcttatcca ccatgatcaa gtgggcttca 120
tccctgggat gcaaggctgg ttcaacataa gaaaatcaat aaatgtaatc catcacataa 180
acagaaccaag agacaaaaac cacatgatta tctcaataga tgcagaaaag gccttggaca 240
aattcaacag cccttcacgc taaacactct taataaacta gatattgatg gaatgtatct 300
caaaaataata agagctatct atgacaaaacc cacagccaat atcactactga atgggcaaag 360
actggaagca ttccctttga aaactggcac aagacaagga tgccctctct caccgctcct 420
attcaacata gtattggaag ttctggccag ggcaatcaag a 461

```

```

<210> 275
<211> 729
<212> DNA
<213> Homo sapiens

```

```

<220>
<221> misc_feature
<222> 164, 193, 207, 215, 216, 220, 223, 241, 244, 254, 269, 271,
275, 290, 295, 298, 309, 318, 325, 326, 331, 352, 380, 401,
411, 420, 424, 426, 431, 433, 435, 438, 440, 442, 443, 448,
453, 464, 465, 468, 474, 475, 481, 487, 491, 503, 516
<223> n = A,T,C or G

```

```

<221> misc_feature
<222> 519, 530, 531, 542, 547, 549, 559, 561, 564, 582, 586, 587,
588, 589, 592, 595, 612, 614, 620, 631, 632, 635, 636, 644,
646, 649, 650, 651, 655, 657, 660, 661, 662, 663, 666, 672,
673, 674, 682, 687, 691, 693, 697, 700, 701, 704, 705
<223> n = A,T,C or G

```

```

<221> misc_feature
<222> 713, 715, 717, 718, 722, 726, 727
<223> n = A,T,C or G

```

```

<400> 275
tttttttttt ttggccaaca ccaagtcttc cacgtgggag gttttattat gttttacaac 60
catgaaaaca taggaaggtg gctgttacag caaacatttc agatagacga atcggccaag 120
ctccccaac cccaccttca cagcctcttc cacacgtctc ccanagattg ttgtccttca 180
cttgcaaatt canggatgtt ggaagtnagc atttnnagtn gcnggaaccc catcagtga 240
ncantaagca gaantacgat gactttgana nacanctgat gaagaacacn ctacnganaa 300
ccctttctnt cgtgttanga tctcnngtcc ntactaatg cgccccctg cnggtccacc 360
atttgggaga actccccccn cgttggatcc ccccttgagt ntccattct ngtcccccan 420

```

```

accngncttg ngngncantn cnnccctcnca ccntgtttcc ctgnngtnaa aatnngtttt 480
nccgccnccc naattccccc ccnaatcaca gcgaanccng aaggccttcn naagtgttta 540
angcccngng gtttcctcnt ntanttgag cctaccctcc cncctnnnt tncnggttg 600
tcgcgccttg gncncgctn gttcctcttt nnggnnaciaa cctngntcnn nggcnctcn 660
nnnctnttcc tnnnactagc tngcctntcc ncnccngngn ncanngcaca ttncncnnac 720
tntgtnncc 729

```

```

<210> 276
<211> 339
<212> DNA
<213> Homo sapiens

```

```

<400> 276
tgacctgaca tgtagtagat acttaataaa tatttggtga atgaatggat gaagtggagt 60
tacagagaaa aatagaaaag tacaaattgt tgtagtggt ttgaaggaaa attatgatct 120
ttcccaaagt tctgacttca ttctaagaca gggtagtagat ctccatacat aattttactt 180
gcttttgaaa atcaaagtag ataacttatt tagattgata atttatttag actggctata 240
aactattaag tgctagcaaa tatacatctt aatctcattt tccacctctt gtgatatagc 300
tatgtagggtg ttgactttaa tggatgtcag gtcaatccc 339

```

```

<210> 277
<211> 664
<212> DNA
<213> Homo sapiens

```

```

<220>
<221> misc_feature
<222> 267, 534, 590, 601, 646, 657
<223> n = A,T,C or G

```

```

<400> 277
tgacctgaca tccataacaa aatctttctc cattatatcc ttctagggga atttcttgaa 60
aagcatccaa aggaacacaa tgatggtaag accgtgcaa gtggggagca gacaccaaag 120
taagaccaca gattttacat tcaacaggta gctcacagta ctttgcccga cactgtgggc 180
agaaatagcc tcctaagtga agccctggct cagtattgcc atccaaatgc gccatgctga 240
aagaggggtt tgcatcctgg tcagatnaag aagcaatggt gtgctgagga aatcccatc 300
gaataagtga gcattcagaa cttgagctag caggaggagg actaagatga tgtgtgagca 360
actctttgta atggctttca tctaaaataa catggtacgt gccaccagt tccagagcaa 420
gtacagtgca aacgcgaact tctgcagaca atccaataac agatactcta atttttagctg 480
cctttagggt cttgattaaa tcataaatat tagatggatc gcaagttgta aggntgctaa 540
aagatgatta gtacttctcg acttgtagt ccaggcatgt tgttttaaan tctgccttag 600
nccctgctta ggggaatttt taaagaagat ggctctccat gttcanggtc aatcacnaat 660
tgcc 664

```

```

<210> 278
<211> 452
<212> DNA
<213> Homo sapiens

```

```

<220>
<221> misc_feature
<222> 430
<223> n = A,T,C or G

```

&lt;400&gt; 278

```

tgacctgaca ttgaggaaga gcacacacct ctgaaattcc ttaggttcag aagggcattt 60
gacacagagt gggcctctga taattcatga aatgcattct gaagtcaccc agaattggagg 120
ctgcaatctg ctgtgctttg ggggttgccct cactgtgctc ctggatatca cacaaaagct 180
gcaatccttc ttcttcaact aacattttgc agtatgtgct gggattttta ctgcagacat 240
gatacatagc ccatagtgcc cagagctgaa cctctggttg agagaagttg ccaaggagcg 300
ggaaaaatgt cttgaaagat ctataggtca ccaatgctgt catcttaca cttgaacttg 360
gccaatctctg tatggttgca tgcagatctt ggagaagagt acgcctctgg aagtcacggg 420
atatccaaan ctgtctgtca gatgtcaggt ca 452

```

&lt;210&gt; 279

&lt;211&gt; 274

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 279

```

tttttttttt ttcggaagg caaatcttact tctgcaaaag ggtgctgctt gcacttttgg 60
ccactgagag agcacaccaa acaaagtagg gaaggggttt ttatccctaa cgcggttatt 120
ccctggttct gtgtcgtgtc ccatttggct ggagtcagac tgcacaatct acactgaccc 180
aactggctac tgtttaaaat tgaatatgaa taattaggta ggaaggggga ggctgtttgt 240
tacggtacaa gacgtgtttg ggcatgtcag gtca 274

```

&lt;210&gt; 280

&lt;211&gt; 272

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 280

```

tacctgacat ggagaaataa cttgtagtat tttgcgtgca atggaatact atatgagggg 60
gaaaatgaat gaactagcaa tgcgtgtatc aacatgaata aatcccaaaa acataataat 120
gttgaatgga aaagggtgagt ttcagaagga tatatatgcc ctctaaatcc atttatgtaa 180
acctttaaaa aactacatta tttatgggtc taagtccatc cagaaaatat ttaaaaacct 240
acatgggatt gataactact gatgtcaggt ca 272

```

&lt;210&gt; 281

&lt;211&gt; 431

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;220&gt;

&lt;221&gt; misc\_feature

&lt;222&gt; 339, 420, 430, 431

&lt;223&gt; n = A,T,C or G

&lt;400&gt; 281

```

tttttttttt ttggccaata gcatgattta aacattggaa aaagtcaaatt gagcaatgag 60
aatttttatg ttctcttgaa taatcaaaag agtaggcaac attggttcct cattcttgaa 120
tagcattaat cagaaaatat tgcatagcct ctatgcctct tagagtaggt gtgctctctc 180
aaatatatca tagtcccaca gtttatttca tgtatatatt ctgcctgaat cacatagaca 240
tttgaatttg caacgcctga tgtaaatata taaattctta ccaatcagaa acatagcaag 300
aaattcaggg acttgggtcat yatcagggtg tgacagcana tccctgtara aacactgata 360
cacactcaca caggtatgca acgtggagat gtcgcyttww kkktywycwm rmrycrwcn 420
aatcacttan n 431

```



<210> 282  
 <211> 98  
 <212> DNA  
 <213> Homo sapiens

<400> 282  
 attcgattcg atgcttgagc ccaggagttc aagactgcag tgagccactg cacttcaggc 60  
 tggacaacag agcgagtccc tgtgccaaaa aaaaaaaaaa 98

<210> 283  
 <211> 764  
 <212> DNA  
 <213> Homo sapiens

<220>  
 <221> misc\_feature  
 <222> 372, 374, 379, 380, 381, 382, 384, 387, 389, 392, 402, 409,  
 411, 419, 421, 432, 440, 447, 452, 457, 466, 470, 471, 480,  
 483, 492, 503, 506, 510, 512, 518, 520, 521, 524, 531, 534,  
 536, 542, 545, 547, 550, 552, 553, 562, 566, 567, 575  
 <223> n = A,T,C or G

<221> misc\_feature  
 <222> 580, 581, 584, 586, 587, 595, 598, 601, 603, 604, 606, 624,  
 629, 630, 646, 651, 652, 653, 656, 659, 664, 665, 681, 691,  
 700, 706, 709, 721, 724, 731, 732, 737, 741, 744, 745, 750,  
 753, 754, 758  
 <223> n = A,T,C or G

<400> 283  
 tttttttttt ttgcgaagca cgtgcacttt attgaatgac actgtagaca ggtgtgtggg 60  
 tataaactgc tgtatctagg ggcaggacca agggggcagg ggcaacagcc ccagcgtgca 120  
 gggccascac tgcacagtgg astgcaaagg ttgcaggcta tgggcggcta ctavtaaccc 180  
 cgttttttcc gtattatctg taacataata tggtagactg tcacagagcc gaatwccart 240  
 hacasgatga atccaawggt caygaggatg ccasaaatca gggcccasat sttcaggcac 300  
 ttggcgggtg gggcatasgc ctgkgcctcg gtcacgtcsc caaccwtcty cctgtcccta 360  
 cmcttgawtc cncncctttn nntnccntna tntgcccgcc cncctcctng ngtcaaccng 420  
 natctgcaact anctccctcn ccccttntgg antctcntcc ttcaantaan nttatccttn 480  
 acncccccct cncctttccc ctncncncn tnatcccnng nccnctatca ntentnccct 540  
 cncntnctn cnnatcggtc cncctnntaa ctacnctttn nacnanncc cactnatncc 600  
 ngnnantttc ttccctccct ccnncgcn tgcgtgcgcc cgtctngcct nnnctncgna 660  
 ccnnactttt atttaccttt ncaccctagc nctctacttn acccancnc tcctacctcc 720  
 nggnccaccc nncctnatc nctnctctn tcnctcntt cccc 764

<210> 284  
 <211> 157  
 <212> DNA  
 <213> Homo sapiens

<400> 284  
 caagtgtagg cacagtgatg aaagcctgga gcaaacacaa tctgtgggta attaacgttt 60  
 atttctcccc ttccaggaac gtcttgcatg gatgatcaaa gatcagctcc tggtaacat 120  
 aaataagcta gttaagata cgttccccta cacttga 157



<210> 290  
 <211> 1646  
 <212> DNA  
 <213> Homo sapiens

<400> 290  
 ggcacgagga gaaatgtaat tccatatttt atttgaaact tattccatat ttttaattgga 60  
 tattgagtga ttgggttatc aaacacccac aaactttaat ttgtttaaat ttatatggct 120  
 ttgaaataga agtataagtt gctaccattt ttgataaca ttgaaagata gtattttacc 180  
 atctttaatc atcttggaat atacaagtcc tgtgaacaac cactctttca cctagcagca 240  
 tgaggccaaa agtaaaggct ttaaattata acatatggga ttcttagtag tatgtttttt 300  
 tcttgaaact cagtggctct atctaacctt actatctcct cactctttct ctaagactaa 360  
 actctaggct cttaaaaatc tgcccacacc aatcttagaa gctctgaaaa gaatttgtct 420  
 ttaaatatct tttaatagta acatgtattt tatggaccaa attgacattt tcgactattt 480  
 tttccaaaaa agtcagggtga atttcagcac actgagttgg gaatttctta tcccagaaga 540  
 ccaaccaatt tcatatttat ttaagattga ttccatactc cgttttcaag gagaatccct 600  
 gcagtctcct taaaggtaga acaaatactt tctatttttt tttcaccatt gtgggattgg 660  
 actttaagag gtgactctaa aaaaacagag acaaatatg tctcagttgt attaagcacg 720  
 gacccatatt atcatattca cttaaaaaaa tgatttcctg tgcacctttt ggcaacttct 780  
 cttttcaatg tagggaaaaa cttagtcacc ctgaaaacc acaaaataaa taaaacttgt 840  
 agatgtgggc agaagggttg ggggtggaca ttgtatgtgt ttaaattaaa ccctgtatca 900  
 ctgagaagct gttgtatggg tcagagaaaa tgaatgctta gaagctgttc acatcttcaa 960  
 gagcagaagc aaaccacatg tctcagctat attattattt attttttatg cataaagtga 1020  
 atcatttctt ctgtattaat ttccaaaggg ttttaccctc tattttaaag ctttgaaaaa 1080  
 cagtgcattg acaatgggtt gatatttttc tttaaaagaa aaatataatt atgaaagcca 1140  
 agataatctg aagcctgttt tattttaaaa ctttttatgt tctgtgggtg atgttggttg 1200  
 ttgtttgttt tctattttgt tgggttttta ctttggtttt tggtttgttt tggtttgttt 1260  
 kgcatactac atgcagttct ttaaccaatg tctgtttggc taatgtaatt aaagttgtta 1320  
 atttatatga gtgcatttca actatgtcaa tgggtttctta atatttattg tgtagaagta 1380  
 ctggttaattt ttttattttac aatatgttta aagagataac agtttgatat gttttcatgt 1440  
 gtttatagca gaagttattt atttctatgg cattccagcg gatatttttg tgtttgcgag 1500  
 gcatgcagtc aatattttgt acagtttagt gacagttatc agcaacgcct gatagcttct 1560  
 ttggccttat gttaaataaa aagacctgtt tgggatgtat tttttatttt taaaaaaaaa 1620  
 aaaaaaaaaa aaaaaaaaaa aaaaaa 1646

<210> 291  
 <211> 1851  
 <212> DNA  
 <213> Homo sapiens

<400> 291  
 tcatcaccat tgccagcagc ggcaccgtta gtcaggtttt ctgggaatcc cacatgagta 60  
 cttccgtgtt cttcattctt cttcaatagc cataaatctt ctactctctg ctggctgttt 120  
 tcaactcctt taagcctttg tgactcttcc tctgatgtca gctttaagtc ttgttctgga 180  
 ttgctgtttt cagaagagat ttttaacatc tgtttttctt tgtagtcaga aagtaactgg 240  
 caaattacat gatgatgact agaaacagca tactctctgg ccgtctttcc agatcttgag 300  
 aagatacatc aacattttgc tcaagtagag ggctgactat acttgctgat ccacaacata 360  
 cagcaagtat gagagcagtt cttccatata tatccagcgc attttaaattc gcttttttct 420  
 tgattaaaaa tttcaccact tgctgttttt gctcatgtat accaagtagc agtgggtgtga 480  
 ggccatgctt gttttttgat tcgatatcag caccgtataa gagcagtgct ttggccatta 540  
 atttatcttc attgtagaca gcatagtgtg gagtggattt tccatactca tctggaatat 600  
 ttggatcagt gccatgttcc agcaacatta acgcacattc atcttcctgg cattgtacgg 660  
 cctttgtcag agctgtcctc tttttgttgt caaggacatt aagttgacat cgtctgtcca 720  
 gcacgagttt tactacttct gaattcccat tggcagaggg cagatgtaga gcagtcctct 780

```

tttgcttgtc cctcttggtc acatccgtgt ccctgagcat gacgatgaga tcctttctgg 840
ggactttacc ccaccaggca gctctgtgga gcttgtccag atcttctcca tggacgtggt 900
acctgggatac catgaaggcg ctgtcatcgt agtctcccca agcgaccacg ttgctcttgc 960
cgctcccctg cagcagggga agcagtggca gcaccacttg cacctcttgc tcccaagcgt 1020
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gtccatccag ggaggaagaa atgcaggaaa tgaaagatgc atgcacgatg gtatactcct 1140
cagccatcaa acttctggac agcaggtcac ttccagcaag gtggagaaag ctgtccaccc 1200
acagaggatg agatccagaa accacaatat ccattcacia acaaacactt ttcagccaga 1260
cacaggtaact gaaatcatgt catctgcggc aacatggtgg aacctacca atcacacatc 1320
aagagatgaa gacactgcag tatacttgca caacgtaata ctcttcatcc ataacaaaat 1380
aatataatth tctcttgag ccatatggat gaactatgaa ggaagaactc cccgaagaag 1440
ccagtcgcag agaagccaca ctgaagctct gtccctcagcc atcagcgcca cggacaggag 1500
tgtgtttctt cccagtgat gcagcctcaa gttatcccga agctgccgca gcacacgggtg 1560
gtccttgaga aacaccccag ctcttccggg ctaacacagg caagtcaata aatgtgataa 1620
tcacataaac agaattaaaa gcaaagtcac ataagcatct caacagacac agaaaaggca 1680
tttgacaaaa tccagcatcc ttgtatttat tgttgagtt ctgagaggaa atgcttctaa 1740
cttttcccca tttagtatta tgttggtgtg gggcttgtca taggtgggtt ttattacttt 1800
aaggtatgtc ccttctatgc ctgttttgct gagggtttta attctcgtgc c 1851

```

<210> 292

<211> 1851

<212> DNA

<213> Homo sapiens

<400> 292

```

tcatcaccat tgccagcagc ggcaccgtta gtcagggttt ctgggaatcc cacatgagta 60
cttcogtggt cttcattctt cttcaatagc cataaatctt ctactctctg ctggctgttt 120
tacttctctt taagcctttg tgactcttcc tctgatgtca gctttaagtc ttgttctgga 180
ttgctgtttt cagaagagat ttttaacatc tgtttttctt tgtagtcaga aagtaactgg 240
caaattacat gatgatgact agaaacagca tactctctgg ccgtctttcc agatcttgag 300
aagatacatc aacattttgc tcaagtagag ggctgactat acttgctgat ccacaacata 360
cagcaagtat gagagcagtt cttccatata tatccagcgc atttaaattc gcttttttct 420
tgattaaaaa tttcaccact tgctgttttt gctcatgtat accaagtagc agtgggtgta 480
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atttatcttc attgtagaca gcatagtgtg gactgggtatt tccatactca tctggaatat 600
ttggatcagt gccatgttcc agcaacatta agcgcatttc atcttctggt cattgtacgg 660
cctttgtcag agctgtcctc tttttgttgt caaggacatt aagttgacat cgtctgtcca 720
gcacgagttt tactacttct gaattcccat tggcagaggc cagatgtaga gcagtcctct 780
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acagaggatg agatccagaa accacaatat ccattcacia acaaacactt ttcagccaga 1260
cacaggtaact gaaatcatgt catctgcggc aacatggtgg aacctacca atcacacatc 1320
aagagatgaa gacactgcag tatacttgca caacgtaata ctcttcatcc ataacaaaat 1380
aatataatth tctcttgag ccatatggat gaactatgaa ggaagaactc cccgaagaag 1440
ccagtcgcag agaagccaca ctgaagctct gtccctcagcc atcagcgcca cggacaggag 1500
tgtgtttctt cccagtgat gcagcctcaa gttatcccga agctgccgca gcacacgggtg 1560
gtccttgaga aacaccccag ctcttccggg ctaacacagg caagtcaata aatgtgataa 1620
tcacataaac agaattaaaa gcaaagtcac ataagcatct caacagacac agaaaaggca 1680
tttgacaaaa tccagcatcc ttgtatttat tgttgagtt ctgagaggaa atgcttctaa 1740

```



<210> 295  
 <211> 1853  
 <212> DNA  
 <213> Homo sapiens

<400> 295  
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 tgggctgggc trgaatcccc tgctggggtt ggcaggtttt ggctgggatt gacttttytc 120  
 ttcaaacaga ttggaaaccc ggagttacct gctagttggt gaaactgggt ggtagacgcg 180  
 atctgttggc tactactggc ttctcctggc tgttaaaagc agatgggtgg tgaggttgat 240  
 tccatgccgg ctgcttcttc tgtgaagaag ccatttgggt tcaggagcaa gatgggcaag 300  
 tgggtgctgcc gttgcttccc ctgctgcagg gagagcggca agagcaacgt gggcacttct 360  
 ggagaccacg acgactctgc tatgaagaca ctgaggagca agatgggcaa gtgggtgccg 420  
 cactgcttcc cctgctgcag ggggagtggt aagagcaacg tgggcgcttc tggagaccac 480  
 gacgaytctg ctatgaagac actcaggaac aagatgggca agtgggtgct cactgcttc 540  
 ccctgctgca gggggagcrg caagagcaag gtgggcgctt ggggagacta cgatgacagy 600  
 gccttcatgg akcccaggta ccacgtccrt ggagaagatc tggacaagct ccacagagct 660  
 gcctgggtgg gtaaagtccc cagaaaggat ctcatcgtca tgctcaggga cackgaygtg 720  
 aacaagargg acaagcaaaa gaggactgct ctacatctgg cctctgccaa tgggaattca 780  
 gaagtagtaa aactcstgct ggacagacga tgtcaactta atgtccttga caacaaaaag 840  
 aggacagctc tgayaaaggc cgtacaatgc caggaagatg aatgtgcgtt aatgttgctg 900  
 gaacatggca ctgatccaaa tattccagat gagtatggaa ataccactct rcactaygct 960  
 rtctayaatg aagataaatt aatggccaaa gcaactgctt tatayggtgc tgatatcgaa 1020  
 tcaaaaaaca agcatggcct cacaccactg ytacttggtt tacatgagca aaaacagcaa 1080  
 gtsgtgaaat ttttaatyaa gaaaaaagcg aattttaaatt gcrctggata gatatggaag 1140  
 ractgctctc atacttgctg tatgttggtg atcagcaagt atagtcagcc ytctacttga 1200  
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 aaacttagct ggggtgtggtg gcgggtgcct gtgagccag ctactcagga rgctgaggca 1740  
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<210> 296  
 <211> 2184  
 <212> DNA  
 <213> Homo sapiens

<400> 296  
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 tttcctctga gaactgcaac aataaataca aggatgctgg attttgtcaa atgccttttc 180  
 tgtgtctgtt gagatgctta tgtgactttg cttttaattc tgtttatgtg attatcacat 240  
 ttattgactt gcctgtgtta gaccggaaga gctggggtgt ttctcaggag ccaccgtgtg 300  
 ctgcggcagc ttccgggataa cttgaggctg catcactggg gaagaaacac aytccctgtcc 360  
 gtggcgctga tggctgagga cagagcttca gtgtggcttc tctgcgactg gcttcttcgg 420  
 ggagtcttct cttcatagtt catccatatg gctccagagg aaaattatat tattttgta 480  
 tggatgaaga gtattacgtt gtgcagatat actgcagtgt cttcatctct tgatgtgtga 540

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gctttctcca ccttgctgga agtgacctgc tgtccagaag tttgatggct gaggagtata 720
ccatcgtgca tgcattcttc atttcctgca tttcttcctc cctggatgga caggggggagc 780
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ctcaaaaaaa aaaaaaaaaa aaaa
2184

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<210> 297
<211> 1855
<212> DNA
<213> Homo sapiens

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<220>
<221> misc_feature
<222> 606
<223> n = A,T,C or G

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<400> 297
tgcacgcacg gccagtgctc tgtgccacgt aactgacgc cccctgagat gtgcacgccg 60
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gccgcccccg cataaccgct agactggcct gtaacggctt gcaggcgcac gccgcacgcg 180
cgtaacggct tggctgccct gtaacggctt gcacgtgcat gctgcacgcg cgtaacggc 240
ttggctggca tgtagccgct tggcttggct ttgcattytt tgctkggctk ggcgttgkty 300
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gtaacntgct agttgggtgaa actggttggg agacgcgac tgcgtgtact actgtttctc 660
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caggggggagc ggcaagagca acgtgggcac ttctggagac cacaacgact cctctgtgaa 840

```

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 tacgaggtga tgcgcctgtc agtggcaagg ttttaagatat ttctgatctc gtgcc 1855

<210> 298  
 <211> 1059  
 <212> DNA  
 <213> Homo sapiens

<400> 298  
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 gcgcttgrgg agactmcgat gacagygcct tcatggagcc caggtaccac gtccgtggag 180  
 aagatctgga caagctccac agagctgccc tgggtgggta aagtccccag aaaggatctc 240  
 atcgtcatgc tcagggacac tgaygtgaac aagarggaca agcaaaagag gactgctcta 300  
 catctggcct ctgccaatgg gaattcagaa gtagtaaaac tcstgctgga cagacgatgt 360  
 caacttaatg tccttgacaa caaaaagagg acagctctga yaaaggccgt acaatgccag 420  
 gaagatgaat gtgctgtaat gttgctggaa catggcactg atccaaatat tccagatgag 480  
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<210> 299  
 <211> 329  
 <212> PRT  
 <213> Homo sapiens

<400> 299  
 Met Asp Ile Val Val Ser Gly Ser His Pro Leu Trp Val Asp Ser Phe  
 1 5 10 15  
 Leu His Leu Ala Gly Ser Asp Leu Leu Ser Arg Ser Leu Met Ala Glu  
 20 25 30  
 Glu Tyr Thr Ile Val His Ala Ser Phe Ile Ser Cys Ile Ser Ser Ser

0924400-000704



35 40 45  
 Leu Asp Gly Gln Gly Glu Arg Gln Glu Gln Arg Gly His Phe Trp Arg  
 50 55 60  
 Pro Gln Arg Leu Leu Cys Glu Asp Ala Trp Glu Gln Glu Val Gln Val  
 65 70 75 80  
 Val Leu Pro Leu Leu Pro Leu Leu Gln Gly Ser Gly Lys Ser Asn Val  
 85 90 95  
 Val Ala Trp Gly Asp Tyr Asp Asp Ser Ala Phe Met Asp Pro Arg Tyr  
 100 105 110  
 His Val His Gly Glu Asp Leu Asp Lys Leu His Arg Ala Ala Trp Trp  
 115 120 125  
 Gly Lys Val Pro Arg Lys Asp Leu Ile Val Met Leu Arg Asp Thr Asp  
 130 135 140  
 Val Asn Lys Arg Asp Lys Gln Lys Arg Thr Ala Leu His Leu Ala Ser  
 145 150 155 160  
 Ala Asn Gly Asn Ser Glu Val Val Lys Leu Val Leu Asp Arg Arg Cys  
 165 170 175  
 Gln Leu Asn Val Leu Asp Asn Lys Lys Arg Thr Ala Leu Thr Lys Ala  
 180 185 190  
 Val Gln Cys Gln Glu Asp Glu Cys Ala Leu Met Leu Leu Glu His Gly  
 195 200 205  
 Thr Asp Pro Asn Ile Pro Asp Glu Tyr Gly Asn Thr Thr Leu His Tyr  
 210 215 220  
 Ala Val Tyr Asn Glu Asp Lys Leu Met Ala Lys Ala Leu Leu Leu Tyr  
 225 230 235 240  
 Gly Ala Asp Ile Glu Ser Lys Asn Lys His Gly Leu Thr Pro Leu Leu  
 245 250 255  
 Leu Gly Ile His Glu Gln Lys Gln Gln Val Val Lys Phe Leu Ile Lys  
 260 265 270  
 Lys Lys Ala Asn Leu Asn Ala Leu Asp Arg Tyr Gly Arg Thr Ala Leu  
 275 280 285  
 Ile Leu Ala Val Cys Cys Gly Ser Ala Ser Ile Val Ser Pro Leu Leu  
 290 295 300  
 Glu Gln Asn Val Asp Val Ser Ser Gln Asp Leu Glu Arg Arg Pro Glu  
 305 310 315 320  
 Ser Met Leu Phe Leu Val Ile Ile Met  
 325

<210> 300  
 <211> 148  
 <212> PRT  
 <213> Homo sapiens

<220>  
 <221> VARIANT  
 <222> 3, 46, 69, 88, 124  
 <223> Xaa = Any Amino Acid

<400> 300  
 Met Thr Xaa Pro Ser Trp Ser Pro Gly Thr Thr Ser Val Glu Lys Ile  
 1 5 10 15  
 Trp Thr Ser Ser Thr Glu Leu Pro Trp Trp Gly Lys Val Pro Arg Lys  
 20 25 30

1020000.004766





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<210> 304
<211> 384
<212> PRT
<213> Homo sapiens

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<400> 304
Met Val Val Glu Val Asp Ser Met Pro Ala Ala Ser Ser Val Lys Lys
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Pro Phe Gly Leu Arg Ser Lys Met Gly Lys Trp Cys Cys Arg Cys Phe
      20             25             30
Pro Cys Cys Arg Glu Ser Gly Lys Ser Asn Val Gly Thr Ser Gly Asp
      35             40             45
His Asp Asp Ser Ala Met Lys Thr Leu Arg Ser Lys Met Gly Lys Trp
      50             55             60
Cys Arg His Cys Phe Pro Cys Cys Arg Gly Ser Gly Lys Ser Asn Val
      65             70             75             80
Gly Ala Ser Gly Asp His Asp Asp Ser Ala Met Lys Thr Leu Arg Asn
      85             90             95
Lys Met Gly Lys Trp Cys Cys His Cys Phe Pro Cys Cys Arg Gly Ser
      100            105            110
Gly Lys Ser Lys Val Gly Ala Trp Gly Asp Tyr Asp Asp Ser Ala Phe
      115            120            125
Met Glu Pro Arg Tyr His Val Arg Gly Glu Asp Leu Asp Lys Leu His
      130            135            140
Arg Ala Ala Trp Trp Gly Lys Val Pro Arg Lys Asp Leu Ile Val Met
      145            150            155            160
Leu Arg Asp Thr Asp Val Asn Lys Lys Asp Lys Gln Lys Arg Thr Ala
      165            170            175
Leu His Leu Ala Ser Ala Asn Gly Asn Ser Glu Val Val Lys Leu Leu
      180            185            190
Leu Asp Arg Arg Cys Gln Leu Asn Val Leu Asp Asn Lys Lys Arg Thr
      195            200            205
Ala Leu Ile Lys Ala Val Gln Cys Gln Glu Asp Glu Cys Ala Leu Met
      210            215            220

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1020880-0042650

Leu Leu Glu His Gly Thr Asp Pro Asn Ile Pro Asp Glu Tyr Gly Asn  
 225 230 235 240  
 Thr Thr Leu His Tyr Ala Ile Tyr Asn Glu Asp Lys Leu Met Ala Lys  
 245 250 255  
 Ala Leu Leu Leu Tyr Gly Ala Asp Ile Glu Ser Lys Asn Lys His Gly  
 260 265 270  
 Leu Thr Pro Leu Leu Leu Gly Val His Glu Gln Lys Gln Gln Val Val  
 275 280 285  
 Lys Phe Leu Ile Lys Lys Lys Ala Asn Leu Asn Ala Leu Asp Arg Tyr  
 290 295 300  
 Gly Arg Thr Ala Leu Ile Leu Ala Val Cys Cys Gly Ser Ala Ser Ile  
 305 310 315 320  
 Val Ser Leu Leu Leu Glu Gln Asn Ile Asp Val Ser Ser Gln Asp Leu  
 325 330 335  
 Ser Gly Gln Thr Ala Arg Glu Tyr Ala Val Ser Ser His His His Val  
 340 345 350  
 Ile Cys Gln Leu Leu Ser Asp Tyr Lys Glu Lys Gln Met Leu Lys Ile  
 355 360 365  
 Ser Ser Glu Asn Ser Asn Pro Glu Asn Val Ser Arg Thr Arg Asn Lys  
 370 375 380

<210> 305  
 <211> 656  
 <212> PRT  
 <213> Homo sapiens

<400> 305  
 Met Val Val Glu Val Asp Ser Met Pro Ala Ala Ser Ser Val Lys Lys  
 1 5 10 15  
 Pro Phe Gly Leu Arg Ser Lys Met Gly Lys Trp Cys Cys Arg Cys Phe  
 20 25 30  
 Pro Cys Cys Arg Glu Ser Gly Lys Ser Asn Val Gly Thr Ser Gly Asp  
 35 40 45  
 His Asp Asp Ser Ala Met Lys Thr Leu Arg Ser Lys Met Gly Lys Trp  
 50 55 60  
 Cys Arg His Cys Phe Pro Cys Cys Arg Gly Ser Gly Lys Ser Asn Val  
 65 70 75 80  
 Gly Ala Ser Gly Asp His Asp Asp Ser Ala Met Lys Thr Leu Arg Asn  
 85 90 95  
 Lys Met Gly Lys Trp Cys Cys His Cys Phe Pro Cys Cys Arg Gly Ser  
 100 105 110  
 Gly Lys Ser Lys Val Gly Ala Trp Gly Asp Tyr Asp Asp Ser Ala Phe  
 115 120 125  
 Met Glu Pro Arg Tyr His Val Arg Gly Glu Asp Leu Asp Lys Leu His  
 130 135 140  
 Arg Ala Ala Trp Trp Gly Lys Val Pro Arg Lys Asp Leu Ile Val Met  
 145 150 155 160  
 Leu Arg Asp Thr Asp Val Asn Lys Lys Asp Lys Gln Lys Arg Thr Ala  
 165 170 175  
 Leu His Leu Ala Ser Ala Asn Gly Asn Ser Glu Val Val Lys Leu Leu  
 180 185 190  
 Leu Asp Arg Arg Cys Gln Leu Asn Val Leu Asp Asn Lys Lys Arg Thr  
 195 200 205

092400.000701



Ala Met Leu Arg Leu Glu Leu Asp Thr Met Lys His Gln Ser Gln Leu  
 645 650 655

<210> 306  
 <211> 671  
 <212> PRT  
 <213> Homo sapiens

<400> 306  
 Met Val Val Glu Val Asp Ser Met Pro Ala Ala Ser Ser Val Lys Lys  
 1 5 10 15  
 Pro Phe Gly Leu Arg Ser Lys Met Gly Lys Trp Cys Cys Arg Cys Phe  
 20 25 30  
 Pro Cys Cys Arg Glu Ser Gly Lys Ser Asn Val Gly Thr Ser Gly Asp  
 35 40 45  
 His Asp Asp Ser Ala Met Lys Thr Leu Arg Ser Lys Met Gly Lys Trp  
 50 55 60  
 Cys Arg His Cys Phe Pro Cys Cys Arg Gly Ser Gly Lys Ser Asn Val  
 65 70 75 80  
 Gly Ala Ser Gly Asp His Asp Asp Ser Ala Met Lys Thr Leu Arg Asn  
 85 90 95  
 Lys Met Gly Lys Trp Cys Cys His Cys Phe Pro Cys Cys Arg Gly Ser  
 100 105 110  
 Gly Lys Ser Lys Val Gly Ala Trp Gly Asp Tyr Asp Asp Ser Ala Phe  
 115 120 125  
 Met Glu Pro Arg Tyr His Val Arg Gly Glu Asp Leu Asp Lys Leu His  
 130 135 140  
 Arg Ala Ala Trp Trp Gly Lys Val Pro Arg Lys Asp Leu Ile Val Met  
 145 150 155 160  
 Leu Arg Asp Thr Asp Val Asn Lys Lys Asp Lys Gln Lys Arg Thr Ala  
 165 170 175  
 Leu His Leu Ala Ser Ala Asn Gly Asn Ser Glu Val Val Lys Leu Leu  
 180 185 190  
 Leu Asp Arg Arg Cys Gln Leu Asn Val Leu Asp Asn Lys Lys Arg Thr  
 195 200 205  
 Ala Leu Ile Lys Ala Val Gln Cys Gln Glu Asp Glu Cys Ala Leu Met  
 210 215 220  
 Leu Leu Glu His Gly Thr Asp Pro Asn Ile Pro Asp Glu Tyr Gly Asn  
 225 230 235 240  
 Thr Thr Leu His Tyr Ala Ile Tyr Asn Glu Asp Lys Leu Met Ala Lys  
 245 250 255  
 Ala Leu Leu Leu Tyr Gly Ala Asp Ile Glu Ser Lys Asn Lys His Gly  
 260 265 270  
 Leu Thr Pro Leu Leu Leu Gly Val His Glu Gln Lys Gln Gln Val Val  
 275 280 285  
 Lys Phe Leu Ile Lys Lys Lys Ala Asn Leu Asn Ala Leu Asp Arg Tyr  
 290 295 300  
 Gly Arg Thr Ala Leu Ile Leu Ala Val Cys Cys Gly Ser Ala Ser Ile  
 305 310 315 320  
 Val Ser Leu Leu Leu Glu Gln Asn Ile Asp Val Ser Ser Gln Asp Leu  
 325 330 335  
 Ser Gly Gln Thr Ala Arg Glu Tyr Ala Val Ser Ser His His Val  
 340 345 350

09924400-000704





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 ttacaatact atcctgcagc ttgacctttt ctgtaagagg gaaggcaaat ggagtgaaat 660  
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 tcctattagt gataagcctc 800

<210> 308  
 <211> 102  
 <212> PRT  
 <213> Homo sapiens

<220>  
 <221> VARIANT  
 <222> 3  
 <223> Xaa = Any Amino Acid

<400> 308  
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 1 5 10 15  
 Ser Pro Leu Lys Cys Ile Leu Ser Gln Trp Asp Lys Phe Asp Pro Gln  
 20 25 30  
 Thr Leu Glu Lys Glu Val Ala His Phe Phe Cys Thr Met Ala Trp Pro  
 35 40 45  
 Gln His Ser Leu Ser Asp Gly Glu Lys Trp Pro Pro Glu Gly Ser Thr  
 50 55 60  
 Asp Tyr Asn Thr Ile Leu Gln Leu Asp Leu Phe Cys Lys Arg Glu Gly  
 65 70 75 80  
 Lys Trp Ser Glu Ile Pro Tyr Val Gln Ala Phe Phe Ser Leu Lys Glu  
 85 90 95  
 Asn Thr Leu Cys Lys Ala  
 100

<210> 309  
 <211> 9  
 <212> PRT  
 <213> Artificial Sequence

<220>  
 <223> Made in the lab

<400> 309  
 Leu Met Ala Glu Glu Tyr Thr Ile Val  
 1 5

<210> 310  
 <211> 9  
 <212> PRT  
 <213> Artificial Sequence

102080-0044260

&lt;220&gt;

&lt;223&gt; Made in the lab

&lt;400&gt; 310

Lys Leu Met Ala Lys Ala Leu Leu Leu  
 1 5

&lt;210&gt; 311

&lt;211&gt; 9

&lt;212&gt; PRT

&lt;213&gt; Artificial Sequence

&lt;220&gt;

&lt;223&gt; Made in the lab

&lt;400&gt; 311

Gly Leu Thr Pro Leu Leu Leu Gly Ile  
 1 5

&lt;210&gt; 312

&lt;211&gt; 10

&lt;212&gt; PRT

&lt;213&gt; Artificial Sequence

&lt;220&gt;

&lt;223&gt; Made in the lab

&lt;400&gt; 312

Lys Leu Val Leu Asp Arg Arg Cys Gln Leu  
 1 5 10

&lt;210&gt; 313

&lt;211&gt; 1852

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 313

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gctttctcca ccttgctgga agtgacctgc tgtccagaag tttgatggct gaggagtata 720
ccatcgtgca tgcattcttc atttctgca tttcttctc cctggatgga cagggggagc 780
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catggagaag atctggacaa gctccacaga gctgcctggt ggggtaaagt ccccgaaaag 1020
gatctcatcg tcatgctcag ggacacggat gtgaacaaga gggacaagca aaagaggact 1080
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<210> 314
<211> 879
<212> DNA
<213> Homo sapiens

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tgcaagtggg gctgccactg cttcccctgc tgcaggggga gcggcaagag caacgtgggtc 180
gcttgggggag actacgatga cagcgccttc atggatccca ggtaccacgt ccatggagaa 240
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gtcatgctca gggacacgga tgtgaacaag agggacaagc aaaagaggac tgctctacat 360
ctggcctctg ccaatgggaa ttcagaagta gtaaaactcg tgctggacag acgatgtcaa 420
cttaatgtcc ttgacaacaa aaagaggaca gctctgacaa aggccgtaca atgccaggaa 480
gatgaatgtg cgttaatgtt gctggaacat ggcactgatc caaatattcc agatgagtat 540
ggaaatacca ctctactata tgctgtctac aatgaagata aattaatggc caaagcactg 600
ctcttatacg gtgctgatat cgaatcaaaa aacaagcatg gcctcacacc actgctactt 660
ggtatacatg agcaaaaaca gcaagtgggt aaatttttaa tcaagaaaaa agcgaattta 720
aatgcgctgg atagatatgg aagaactgct ctcatacttg ctgtatgttg tggatcagca 780
agtatagtca gccctctact tgagcaaaat gttgatgtat cttctcaaga tctggaaaga 840
cggccagaga gtatgctgtt tctagtcata atcatgtaa 879

```

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<210> 315
<211> 292
<212> PRT
<213> Homo sapiens

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<400> 315
Met His Leu Ser Phe Pro Ala Phe Leu Pro Pro Trp Met Asp Arg Gly
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Ser Gly Lys Ser Asn Val Gly Thr Ser Gly Asp His Asn Asp Ser Ser
          20                      25                      30

Val Lys Thr Leu Gly Ser Lys Arg Cys Lys Trp Cys Cys His Cys Phe

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0924400.080701

35	40	45
Pro Cys Cys Arg Gly Ser Gly Lys Ser Asn Val Val Ala Trp Gly Asp		
50	55	60
Tyr Asp Asp Ser Ala Phe Met Asp Pro Arg Tyr His Val His Gly Glu		
65	70	75 80
Asp Leu Asp Lys Leu His Arg Ala Ala Trp Trp Gly Lys Val Pro Arg		
	85	90 95
Lys Asp Leu Ile Val Met Leu Arg Asp Thr Asp Val Asn Lys Arg Asp		
	100	105 110
Lys Gln Lys Arg Thr Ala Leu His Leu Ala Ser Ala Asn Gly Asn Ser		
	115	120 125
Glu Val Val Lys Leu Val Leu Asp Arg Arg Cys Gln Leu Asn Val Leu		
	130	135 140
Asp Asn Lys Lys Arg Thr Ala Leu Thr Lys Ala Val Gln Cys Gln Glu		
	145	150 155 160
Asp Glu Cys Ala Leu Met Leu Leu Glu His Gly Thr Asp Pro Asn Ile		
	165	170 175
Pro Asp Glu Tyr Gly Asn Thr Thr Leu His Tyr Ala Val Tyr Asn Glu		
	180	185 190
Asp Lys Leu Met Ala Lys Ala Leu Leu Leu Tyr Gly Ala Asp Ile Glu		
	195	200 205
Ser Lys Asn Lys His Gly Leu Thr Pro Leu Leu Leu Gly Ile His Glu		
	210	215 220
Gln Lys Gln Gln Val Val Lys Phe Leu Ile Lys Lys Lys Ala Asn Leu		
	225	230 235 240
Asn Ala Leu Asp Arg Tyr Gly Arg Thr Ala Leu Ile Leu Ala Val Cys		
	245	250 255
Cys Gly Ser Ala Ser Ile Val Ser Pro Leu Leu Glu Gln Asn Val Asp		
	260	265 270
Val Ser Ser Gln Asp Leu Glu Arg Arg Pro Glu Ser Met Leu Phe Leu		
	275	280 285
Val Ile Ile Met		
290		

<210> 316  
 <211> 584  
 <212> DNA  
 <213> Homo sapiens

092400-000701

&lt;400&gt; 316

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gaggcttata actaatagga aggggagcta tagggaggct aggatatggg ggtaagctga 180
gaggtcctcc tgtgggatgt aaatttcaag ctttgcatag tgtattctcc ttcaatgaaa 240
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gagaatgttg gggccaagcc atagtgcaga aaaaaaatg agccacctct tttccagggt 420
tttgtgggtc aaatttgtcc cattggctta ggatgcattt caaagggtgag cctgttgatg 480
cctgagtgtt tcccatctga aagacaaaac tgcccatggg tttggtttgt tttgtttctc 540
cccctgcccc agaactatca aactcctgag ccaacaacta aaaa 584

```

&lt;210&gt; 317

&lt;211&gt; 829

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 317

```

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acttcatttt tggtagataa catctttata ggacaggggt aaaatcccaa tactaacagg 120
agaatgctta ggactctaac aggtttttga gaatgtgttg gtaagggcca ctcaatccaa 180
tttttcttgg tcctccttgt ggtctaggag gacaggcaag ggtgcagatt ttcaagaatg 240
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ctagtgtttc tgttgctgtg tcagtgcaga caactattcc gatcagcagg gtccagggac 360
cactgcagggt tcttgggcag ggggagaaac aaaacaaacc aaaacctggt gcagttttgt 420
ctttcagatg ggaaacactc aggcataaac aggtcacctt ttgaaatgca tcctaagcca 480
atggggacaaa tttgacctac aaaccttgga aaaagagggt gctcattttt tttgcactat 540
ggcttggccc caacattctc tctctgatgg ggaaaaatgg ccacctgagg gaagtacaga 600
ttacaatact atcctgcagc ttgacctttt ctgtaagagg gaaggcaaat ggagtgaat 660
accttatgtc caagctttct tttcattgaa ggagaataca ctatgcaaag cttgaaattt 720
acatcccaca ggaggacctc tcagcttacc cccatatact agcctcccta tagctcccct 780
tcctattagt gataagcctc ctctaataac cccacccag aagaaaata 829

```

&lt;210&gt; 318

&lt;211&gt; 30

&lt;212&gt; PRT

&lt;213&gt; Homo sapien

&lt;400&gt; 318

```

Thr Ala Ala Ser Asp Asn Phe Gln Leu Ser Gln Gly Gly Gln Gly Phe
1           5           10          15

```

```

Ala Ile Pro Ile Gly Gln Ala Met Ala Ile Ala Gly Gln Ile
20           25          30

```

&lt;210&gt; 319

&lt;211&gt; 41

&lt;212&gt; DNA

&lt;213&gt; Artificial Sequence

&lt;220&gt;

<223> PCR primer

<400> 319

ggcctctgcc aatgggaact cagaagtagt aaaactcctg c 41

<210> 320

<211> 41

<212> DNA

<213> Artificial Sequence

<220>

<223> PCR primer

<400> 320

gcaggagttt tactacttct gagttcccat tggcagaggc c 41

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<211> 60

<212> DNA

<213> Artificial Sequence

<220>

<223> PCR primer

<400> 321

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ttccatgccg 60

<210> 322

<211> 42

<212> DNA

<213> Artificial Sequence

<220>

<223> PCR primer

<400> 322

ccggaattct tatttatttc tggttcttga gacattttct gg 42

<210> 323

<211> 1590

<212> DNA

<213> Homo sapiens

<400> 323

atgcatcacc atcaccatca cacggccgcg tccgataact tccagctgtc ccagggtggg 60  
cagggattcg ccattccgat cgggcaggcg atggcgatcg cgggccagat caagcttccc 120

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Val Thr Trp Gln Thr Lys Ser Gly Gly Thr Arg Thr Gly Asn Val Thr  
 115 120 125  
 Leu Ala Glu Gly Pro Pro Ala Glu Phe Pro Leu Val Pro Arg Gly Ser  
 130 135 140  
 Pro Met Val Val Glu Val Asp Ser Met Pro Ala Ala Ser Ser Val Lys  
 145 150 155 160  
 Lys Pro Phe Gly Leu Arg Ser Lys Met Gly Lys Trp Cys Cys Arg Cys  
 165 170 175  
 Phe Pro Cys Cys Arg Glu Ser Gly Lys Ser Asn Val Gly Thr Ser Gly  
 180 185 190  
 Asp His Asp Asp Ser Ala Met Lys Thr Leu Arg Ser Lys Met Gly Lys  
 195 200 205  
 Trp Cys Arg His Cys Phe Pro Cys Cys Arg Gly Ser Gly Lys Ser Asn  
 210 215 220  
 Val Gly Ala Ser Gly Asp His Asp Asp Ser Ala Met Lys Thr Leu Arg  
 225 230 235 240  
 Asn Lys Met Gly Lys Trp Cys Cys His Cys Phe Pro Cys Cys Arg Gly  
 245 250 255  
 Ser Gly Lys Ser Lys Val Gly Ala Trp Gly Asp Tyr Asp Asp Ser Ala  
 260 265 270  
 Phe Met Glu Pro Arg Tyr His Val Arg Gly Glu Asp Leu Asp Lys Leu  
 275 280 285  
 His Arg Ala Ala Trp Trp Gly Lys Val Pro Arg Lys Asp Leu Ile Val  
 290 295 300  
 Met Leu Arg Asp Thr Asp Val Asn Lys Lys Asp Lys Gln Lys Arg Thr  
 305 310 315 320  
 Ala Leu His Leu Ala Ser Ala Asn Gly Asn Ser Glu Val Val Lys Leu  
 325 330 335  
 Leu Leu Asp Arg Arg Cys Gln Leu Asn Val Leu Asp Asn Lys Lys Arg  
 340 345 350  
 Thr Ala Leu Ile Lys Ala Val Gln Cys Gln Glu Asp Glu Cys Ala Leu  
 355 360 365  
 Met Leu Leu Glu His Gly Thr Asp Pro Asn Ile Pro Asp Glu Tyr Gly  
 370 375 380  
 Asn Thr Thr Leu His Tyr Ala Ile Tyr Asn Glu Asp Lys Leu Met Ala  
 385 390 395 400

09924400-080701  
 102080-004466



Lys Ala Leu Leu Leu Tyr Gly Ala Asp Ile Glu Ser Lys Asn Lys His  
405 410 415

Gly Leu Thr Pro Leu Leu Leu Gly Val His Glu Gln Lys Gln Gln Val  
420 425 430

Val Lys Phe Leu Ile Lys Lys Lys Ala Asn Leu Asn Ala Leu Asp Arg  
435 440 445

Tyr Gly Arg Thr Ala Leu Ile Leu Ala Val Cys Cys Gly Ser Ala Ser  
450 455 460

Ile Val Ser Leu Leu Leu Glu Gln Asn Ile Asp Val Ser Ser Gln Asp  
465 470 475 480

Leu Ser Gly Gln Thr Ala Arg Glu Tyr Ala Val Ser Ser His His His  
485 490 495

Val Ile Cys Gln Leu Leu Ser Asp Tyr Lys Glu Lys Gln Met Leu Lys  
500 505 510

Ile Ser Ser Glu Asn Ser Asn Pro Glu Asn Val Ser Arg Thr Arg Asn  
515 520 525

Lys

<210> 325

<211> 1155

<212> DNA

<213> Homo sapiens

<400> 325

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agcaacatgg gcacttctgg agaccacgac gactccttta tgaagatgct caggagcaag 180
atgggcaagt gttgccgcca ctgcttcccc tgctgcaggg ggagcggcac gagcaacgtg 240
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ggagactacg accacagcgc cttcatggag ccgaggtacc acatccgtcg agaagatctg 420
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ctcagggaca ctgacatgaa caagagggac aaggaaaaga ggactgctct acatttggcc 540
tctgccaatg gaaattcaga agtagtaca ctcctgctgg acagacgatg tcaacttaat 600
gtccttgaca acaaaaaaag gacagctctg ataaaggcca tacaatgcca ggaagatgaa 660
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accagaataa aataa                                     1155

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0924400-000701



Ala Leu Leu Leu Tyr Gly Ala Asp Ile Glu Ser Lys Asn Lys Val Gly  
260 265 270

Leu Thr Pro Leu Leu Leu Gly Val His Glu Gln Lys Gln Gln Val Val  
275 280 285

Lys Phe Leu Ile Lys Lys Lys Ala Asn Leu Asn Val Leu Asp Arg Tyr  
290 295 300

Gly Arg Thr Ala Leu Ile Leu Ala Val Cys Cys Gly Ser Ala Ser Ile  
305 310 315 320

Val Asn Leu Leu Leu Glu Gln Asn Val Asp Val Ser Ser Gln Asp Leu  
325 330 335

Ser Gly Gln Thr Ala Arg Glu Tyr Ala Val Ser Ser His His His Val  
340 345 350

Ile Cys Glu Leu Leu Ser Asp Tyr Lys Glu Lys Gln Met Leu Lys Ile  
355 360 365

Ser Ser Glu Asn Ser Asn Pro Glu Asn Val Ser Arg Thr Arg Asn Lys  
370 375 380

<210> 327  
<211> 634  
<212> DNA  
<213> Homo sapiens

<400> 327  
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cagacgatgt caacttaata tccttgacaa caaaaagagg acagctctga caaaggccgt 120  
acaatgccag gaagatgaat gtgcgttaat gttgctggaa catggcactg atccgaatat 180  
tccagatgag tatggaaata ccgctctaca ctatgctatc tacaatgaag ataaattaat 240  
ggccaaagca ctgctcttat acggtgctga tatcgaatca aaaaacaagc atggcctcac 300  
accactgtta cttggtgtac atgagcaaaa acagcaagtg gtgaaatttt taatcaagaa 360  
aaaagcaaat ttaaatgcac tggatagata tggagaact gctctcatac ttgctgtatg 420  
ttgtggatcg gcaagtatag tcagccttct acttgagcaa aacattgatg tatcttctca 480  
agatctatct ggacagacgg ccagagagta tgctgtttct agtcgtcata atgtaatttg 540  
ccagttactt tctgactaca aagaaaaaca gatactaaaa gtctcttctg aaaacagcaa 600  
tccaggaaat gtctcaagaa ccagaaataa ataa 634

<210> 328  
<211> 1155  
<212> DNA  
<213> Homo sapiens

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agcaacgtgg gcacttcttg agaccacgac gactctgcta tgaagacact caggagcaag 180  
atgggcaagt ggtgccgcca ctgcttcccc tgctgcaggg ggagtggcaa gagcaacgtg 240  
ggcgcttctg gagaccacga cgactctgct atgaagacac tcaggaacaa gatgggcaag 300  
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gacaagctcc acagagctgc ctggtggggt aaagtcccca gaaaggatct catcgatcatg 480
ctcagggaca ctgacgtgaa caagcaggac aagcaaaaga ggactgctct acatctggcc 540
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gtccttgaca acaaaaagag gacagctctg ataaaggccg tacaatgcca ggaagatgaa 660
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accactctgc actacgtat ctataatgaa gataaattaa tggccaaagc actgctctta 780
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gccagagagt atgctgtttc tagtcatcat catgtaattt gccagttact ttctgactac 1080
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<210> 329

<211> 1155

<212> DNA

<213> Homo sapiens

<400> 329

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atgggcaagt gttgccacca ctgcttcccc tgctgcaggg ggagcggcac gagcaatgtg 240
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<210> 330

<211> 1155

<212> DNA

<213> Homo sapiens

<400> 330

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agcaacatgg gcacttcttg agaccacgac gactccttta tgaagatgct caggagcaag 180
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tggtgctgtc actgcttccc ctgctgcagg gggagcggca agagcaacgt gggcgcttgg 360

```

```

ggagactacg accacagcgc cttcatggag ccgaggtacc acatccgtcg agaagatctg 420
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ctcagggaca ctgacatgaa caagagggac aaggaaaaga ggactgctct acatttggcc 540
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tgtgtgttaa tgttgctgga acatggcgct gatcgaaata ttccagatga gtatggaaat 720
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```

<210> 331

<211> 210

<212> PRT

<213> Homo sapiens

<400> 331

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Thr Ala Leu His Leu Ala Ser Ala Asn Gly Asn Ser Glu Val Val Lys
      5              10              15

Leu Leu Leu Asp Arg Arg Cys Gln Leu Asn Ile Leu Asp Asn Lys Lys
      20              25              30

Arg Thr Ala Leu Thr Lys Ala Val Gln Cys Gln Glu Asp Glu Cys Ala
      35              40              45

Leu Met Leu Leu Glu His Gly Thr Asp Pro Asn Ile Pro Asp Glu Tyr
      50              55              60

Gly Asn Thr Ala Leu His Tyr Ala Ile Tyr Asn Glu Asp Lys Leu Met
      65              70              75              80

Ala Lys Ala Leu Leu Leu Tyr Gly Ala Asp Ile Glu Ser Lys Asn Lys
      85              90              95

His Gly Leu Thr Pro Leu Leu Leu Gly Val His Glu Gln Lys Gln Gln
      100             105             110

Val Val Lys Phe Leu Ile Lys Lys Lys Ala Asn Leu Asn Ala Leu Asp
      115             120             125

Arg Tyr Gly Arg Thr Ala Leu Ile Leu Ala Val Cys Cys Gly Ser Ala
      130             135             140

Ser Ile Val Ser Leu Leu Leu Glu Gln Asn Ile Asp Val Ser Ser Gln
      145             150             155             160

Asp Leu Ser Gly Gln Thr Ala Arg Glu Tyr Ala Val Ser Ser Arg His
      165             170             175

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Asn Val Ile Cys Gln Leu Leu Ser Asp Tyr Lys Glu Lys Gln Ile Leu  
180 185 190

Lys Val Ser Ser Glu Asn Ser Asn Pro Gly Asn Val Ser Arg Thr Arg  
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Asn Lys  
210

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<400> 332  
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Pro Phe Asp Leu Arg Ser Lys Met Gly Lys Trp Cys His His Arg Phe  
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Pro Cys Cys Arg Gly Ser Gly Lys Ser Asn Met Gly Thr Ser Gly Asp  
35 40 45

His Asp Asp Ser Phe Met Lys Met Leu Arg Ser Lys Met Gly Lys Cys  
50 55 60

Cys Arg His Cys Phe Pro Cys Cys Arg Gly Ser Gly Thr Ser Asn Val  
65 70 75 80

Gly Thr Ser Gly Asp His Glu Asn Ser Phe Met Lys Met Leu Arg Ser  
85 90 95

Lys Met Gly Lys Trp Cys Cys His Cys Phe Pro Cys Cys Arg Gly Ser  
100 105 110

Gly Lys Ser Asn Val Gly Ala Trp Gly Asp Tyr Asp His Ser Ala Phe  
115 120 125

Met Glu Pro Arg Tyr His Ile Arg Arg Glu Asp Leu Asp Lys Leu His  
130 135 140

Arg Ala Ala Trp Trp Gly Lys Val Pro Arg Lys Asp Leu Ile Val Met  
145 150 155 160

Leu Arg Asp Thr Asp Met Asn Lys Arg Asp Lys Glu Lys Arg Thr Ala  
165 170 175

Leu His Leu Ala Ser Ala Asn Gly Asn Ser Glu Val Val Gln Leu Leu  
180 185 190

Leu Asp Arg Arg Cys Gln Leu Asn Val Leu Asp Asn Lys Lys Arg Thr  
195 200 205

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Ala Leu Ile Lys Ala Ile Gln Cys Gln Glu Asp Glu Cys Val Leu Met  
 210 215 220  
 Leu Leu Glu His Gly Ala Asp Arg Asn Ile Pro Asp Glu Tyr Gly Asn  
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 Thr Ala Leu His Tyr Ala Ile Tyr Asn Glu Asp Lys Leu Met Ala Lys  
 245 250 255  
 Ala Leu Leu Leu Tyr Gly Ala Asp Ile Glu Ser Lys Asn Lys Cys Gly  
 260 265 270  
 Leu Thr Pro Leu Leu Leu Gly Val His Glu Gln Lys Gln Gln Val Val  
 275 280 285  
 Lys Phe Leu Ile Lys Lys Lys Ala Asn Leu Asn Val Leu Asp Arg Tyr  
 290 295 300  
 Gly Arg Thr Ala Leu Ile Leu Ala Val Cys Cys Gly Ser Ala Ser Ile  
 305 310 315 320  
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 Ser Gly Gln Thr Ala Arg Glu Tyr Ala Val Ser Ser His His His Val  
 340 345 350  
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 370 375 380  
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 Pro Phe Asp Leu Arg Ser Lys Met Gly Lys Trp Cys His His Arg Phe  
 20 25 30  
 Pro Cys Cys Arg Gly Ser Gly Lys Ser Asn Met Gly Thr Ser Gly Asp  
 35 40 45  
 His Asp Asp Ser Phe Met Lys Thr Leu Arg Ser Lys Met Gly Lys Cys  
 50 55 60  
 Cys His His Cys Phe Pro Cys Cys Arg Gly Ser Gly Thr Ser Asn Val

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65			70						75				80			
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Gly	Lys	Ser 115	Asn	Val	Gly	Thr	Trp 120	Gly	Asp	Tyr	Asp 125	Asp	Ser	Ala	Phe	
Met	Glu 130	Pro	Arg	Tyr	His	Val 135	Arg	Arg	Glu	Asp 140	Leu	Asp	Lys	Leu	His	
Arg 145	Ala	Ala	Trp	Trp	Gly 150	Lys	Val	Pro	Arg	Lys 155	Asp	Leu	Ile	Val	Met 160	
Leu	Arg	Asp	Thr	Asp 165	Met	Asn	Lys	Arg	Asp 170	Lys	Gln	Lys	Arg	Thr 175	Ala	
Leu	His	Leu	Ala 180	Ser	Ala	Asn	Gly	Asn 185	Ser	Glu	Val	Val	Gln 190	Leu	Leu	
Leu	Asp	Arg 195	Arg	Cys	Gln	Leu	Asn 200	Val	Leu	Asp	Asn	Lys 205	Lys	Arg	Thr	
Ala 210	Leu	Ile	Lys	Ala	Val	Gln 215	Cys	Gln	Glu	Asp	Glu 220	Cys	Val	Leu	Met	
Leu 225	Leu	Glu	His	Gly	Ala 230	Asp	Gly	Asn	Ile	Gln 235	Asp	Glu	Tyr	Gly	Asn 240	
Thr	Ala	Leu	His 245	Tyr	Ala	Ile	Tyr	Asn 250	Glu	Asp	Lys	Leu	Met	Ala 255	Lys	
Ala	Leu	Leu	Leu 260	Tyr	Gly	Ala	Asp	Ile 265	Glu	Ser	Lys	Asn	Lys 270	Cys	Gly	
Leu	Thr	Pro 275	Leu	Leu	Leu	Gly	Val 280	His	Glu	Gln	Lys	Gln 285	Gln	Val	Val	
Lys	Phe 290	Leu	Ile	Lys	Lys	Lys 295	Ala	Asn	Leu	Asn	Ala 300	Leu	Asp	Arg	Tyr	
Gly 305	Arg	Thr	Ala	Leu	Ile 310	Leu	Ala	Val	Cys	Cys 315	Gly	Ser	Ala	Ser	Ile 320	
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Ser	Gly	Gln 340	Thr	Ala	Arg	Glu	Tyr 345	Ala	Val	Ser	Ser	His 350	His	His	Val	
Ile	Cys	Glu	Leu	Leu	Ser	Asp	Tyr	Lys	Glu	Lys	Gln	Met	Leu	Lys	Ile	



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 370 375 380  
  
 <210> 334  
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 <213> Homo sapiens  
  
 <400> 334  
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 Pro Phe Gly Leu Arg Ser Lys Met Gly Lys Trp Cys Cys Arg Cys Phe  
 20 25 30  
 Pro Cys Cys Arg Glu Ser Gly Lys Ser Asn Val Gly Thr Ser Gly Asp  
 35 40 45  
 His Asp Asp Ser Ala Met Lys Thr Leu Arg Ser Lys Met Gly Lys Trp  
 50 55 60  
 Cys Arg His Cys Phe Pro Cys Cys Arg Gly Ser Gly Lys Ser Asn Val  
 65 70 75 80  
 Gly Ala Ser Gly Asp His Asp Asp Ser Ala Met Lys Thr Leu Arg Asn  
 85 90 95  
 Lys Met Gly Lys Trp Cys Cys His Cys Phe Pro Cys Cys Arg Gly Ser  
 100 105 110  
 Ser Lys Ser Lys Val Gly Ala Trp Gly Asp Tyr Asp Asp Ser Ala Phe  
 115 120 125  
 Met Glu Pro Arg Tyr His Val Arg Gly Glu Asp Leu Asp Lys Leu His  
 130 135 140  
 Arg Ala Ala Trp Trp Gly Lys Val Pro Arg Lys Asp Leu Ile Val Met  
 145 150 155 160  
 Leu Arg Asp Thr Asp Val Asn Lys Gln Asp Lys Gln Lys Arg Thr Ala  
 165 170 175  
 Leu His Leu Ala Ser Ala Asn Gly Asn Ser Glu Val Val Lys Leu Leu  
 180 185 190  
 Leu Asp Arg Arg Cys Gln Leu Asn Val Leu Asp Asn Lys Lys Arg Thr  
 195 200 205  
 Ala Leu Ile Lys Ala Val Gln Cys Gln Glu Asp Glu Cys Ala Leu Met  
 210 215 220

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Leu Leu Glu His Gly Thr Asp Pro Asn Ile Pro Asp Glu Tyr Gly Asn  
 225 230 235 240  
 Thr Thr Leu His Tyr Ala Ile Tyr Asn Glu Asp Lys Leu Met Ala Lys  
 245 250 255  
 Ala Leu Leu Leu Tyr Gly Ala Asp Ile Glu Ser Lys Asn Lys His Gly  
 260 265 270  
 Leu Thr Pro Leu Leu Leu Gly Val His Glu Gln Lys Gln Gln Val Val  
 275 280 285  
 Lys Phe Leu Ile Lys Lys Lys Ala Asn Leu Asn Ala Leu Asp Arg Tyr  
 290 295 300  
 Gly Arg Thr Ala Leu Ile Leu Ala Val Cys Cys Gly Ser Ala Ser Ile  
 305 310 315 320  
 Val Ser Leu Leu Leu Glu Gln Asn Ile Asp Val Ser Ser Gln Asp Leu  
 325 330 335  
 Ser Gly Gln Thr Ala Arg Glu Tyr Ala Val Ser Ser His His His Val  
 340 345 350  
 Ile Cys Gln Leu Leu Ser Asp Tyr Lys Glu Lys Gln Met Leu Lys Ile  
 355 360 365  
 Ser Ser Glu Asn Ser Asn Pro Glu Asn Val Ser Arg Thr Arg Asn Lys  
 370 375 380

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 <213> Homo sapiens

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 agcaacgttg gcacttcttg agaccacgac gactctgcta tgaagacact caggagcaag 180  
 atgggcaagt ggtgccgcca ctgcttcccc tgctgcaggg ggagtggcaa gagcaacgtg 240  
 ggcgcttctg gagaccacga cgactctgct atgaagacac tcaggaacaa gatgggcaag 300  
 tgggtgctgcc actgcttccc ctgctgcagg gggagcggca agagcaaggt gggcgcttg 360  
 ggagactacg atgacagtgc ctatcatggag ccaggtacc acgtccgttg agaagatctg 420  
 gacaagctcc acagagctgc ctggtggggt aaagtcccca gaaaggatct catcgatcatg 480  
 ctgagggaca ctgacgtgaa caagaaggac aagcaaaaga ggactgctct acatctggcc 540  
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gccagagagt atgctgtttc tagtcatcat catgtaattt gccagttact ttctgactac 1080  
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<213> Homo sapiens

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Met Val Val Glu Val Asp Ser Met Pro Ala Ala Ser Ser Val Lys Lys  
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Pro Phe Gly Leu Arg Ser Lys Met Gly Lys Trp Cys Cys Arg Cys Phe  
20 25 30

Pro Cys Cys Arg Glu Ser Gly Lys Ser Asn Val Gly Thr Ser Gly Asp  
35 40 45

His Asp Asp Ser Ala Met Lys Thr Leu Arg Ser Lys Met Gly Lys Trp  
50 55 60

Cys Arg His Cys Phe Pro Cys Cys Arg Gly Ser Gly Lys Ser Asn Val  
65 70 75 80

Gly Ala Ser Gly Asp His Asp Asp Ser Ala Met Lys Thr Leu Arg Asn  
85 90 95

Lys Met Gly Lys Trp Cys Cys His Cys Phe Pro Cys Cys Arg Gly Ser  
100 105 110

Gly Lys Ser Lys Val Gly Ala Trp Gly Asp Tyr Asp Asp Ser Ala Phe  
115 120 125

Met Glu Pro Arg Tyr His Val Arg Gly Glu Asp Leu Asp Lys Leu His  
130 135 140

Arg Ala Ala Trp Trp Gly Lys Val Pro Arg Lys Asp Leu Ile Val Met  
145 150 155 160

Leu Arg Asp Thr Asp Val Asn Lys Lys Asp Lys Gln Lys Arg Thr Ala  
165 170 175

Leu His Leu Ala Ser Ala Asn Gly Asn Ser Glu Val Val Lys Leu Leu  
180 185 190

Leu Asp Arg Arg Cys Gln Leu Asn Val Leu Asp Asn Lys Lys Arg Thr  
195 200 205

Ala Leu Ile Lys Ala Val Gln Cys Gln Glu Asp Glu Cys Ala Leu Met  
210 215 220

Leu Leu Glu His Gly Thr Asp Pro Asn Ile Pro Asp Glu Tyr Gly Asn

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225                      230                      235                      240  
 Thr Thr Leu His Tyr Ala Ile Tyr Asn Glu Asp Lys Leu Met Ala Lys  
                                  245                      250                      255  
 Ala Leu Leu Leu Tyr Gly Ala Asp Ile Glu Ser Lys Asn Lys His Gly  
                                  260                      265                      270  
 Leu Thr Pro Leu Leu Leu Gly Val His Glu Gln Lys Gln Gln Val Val  
                                  275                      280                      285  
 Lys Phe Leu Ile Lys Lys Lys Ala Asn Leu Asn Ala Leu Asp Arg Tyr  
                                  290                      295                      300  
 Gly Arg Thr Ala Leu Ile Leu Ala Val Cys Cys Gly Ser Ala Ser Ile  
 305                                   310                      315                      320  
 Val Ser Leu Leu Leu Glu Gln Asn Ile Asp Val Ser Ser Gln Asp Leu  
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 Ser Gly Gln Thr Ala Arg Glu Tyr Ala Val Ser Ser His His His Val  
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 Ile Cys Gln Leu Leu Ser Asp Tyr Lys Glu Lys Gln Met Leu Lys Ile  
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<213> Homo sapiens

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atgggcaagt	ggtgccgcca	ctgcttcccc	tggtgcaggg	ggagcagcaa	gagcaacgtg	240
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tggtgctgcc	actgcttccc	ctgctgcagg	gggagcggca	agagcaaagt	gggcccttgg	360
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ctcaaggaca	ctgacatgaa	caagaaggac	aagcaaaaaga	ggactgctct	acatctggcc	540
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atccttgaca	acaaaaagag	gacagctctg	acaaaggccg	tacaatgccg	ggaagatgaa	660
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accgctctac	actatgctat	ctacaatgaa	gataaattaa	tggccaaagc	actgctctta	780
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catgagcaaa	aacagcaagt	ggtgaaattc	ttaatcaaga	aaaaagcaaa	tttaaattgca	900
ctggatagat	atggaagaac	tgctctcata	cttgctgtat	gtttgtggatc	ggcaagtata	960
gtcagccttc	tacttgagca	aaacattgat	gtatcttctc	aagatctatc	tggacagacg	1020
gccagagagt	atgctgtttc	tagtcatcat	aatgtaattt	gccagttact	ttctgactac	1080
aaaagaaaaac	agatgctaaa	agtctcttct	gaaaacagca	atccaggaaa	tgtctcaaga	1140
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<213> Homo sapiens

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Pro Phe Gly Leu Arg Ser Lys Met Gly Lys Trp Cys Arg His Cys Phe  
20 25 30

Pro Trp Cys Arg Gly Ser Gly Lys Ser Asn Val Gly Thr Ser Gly Asp  
35 40 45

His Asp Asp Ser Ala Met Lys Thr Leu Arg Ser Lys Met Gly Lys Trp  
50 55 60

Cys Arg His Cys Phe Pro Trp Cys Arg Gly Ser Ser Lys Ser Asn Val  
65 70 75 80

Gly Thr Ser Gly Asp His Asp Asp Ser Ala Met Lys Thr Leu Arg Ser

85										90					95				
Lys	Met	Gly	Lys	Trp	Cys	Cys	His	Cys	Phe	Pro	Cys	Cys	Arg	Gly	Ser				
			100					105					110						
Gly	Lys	Ser	Lys	Val	Gly	Pro	Trp	Gly	Asp	Tyr	Asp	Asp	Ser	Ala	Phe				
		115					120					125							
Met	Glu	Pro	Arg	Tyr	His	Val	Arg	Arg	Glu	Asp	Leu	Asp	Lys	Leu	His				
	130					135					140								
Arg	Ala	Ala	Trp	Trp	Gly	Lys	Val	Pro	Arg	Lys	Asp	Leu	Ile	Val	Met				
145					150					155					160				
Leu	Lys	Asp	Thr	Asp	Met	Asn	Lys	Lys	Asp	Lys	Gln	Lys	Arg	Thr	Ala				
				165					170					175					
Leu	His	Leu	Ala	Ser	Ala	Asn	Gly	Asn	Ser	Glu	Val	Val	Lys	Leu	Leu				
			180					185					190						
Leu	Asp	Arg	Arg	Cys	Gln	Leu	Asn	Ile	Leu	Asp	Asn	Lys	Lys	Arg	Thr				
		195					200					205							
Ala	Leu	Thr	Lys	Ala	Val	Gln	Cys	Arg	Glu	Asp	Glu	Cys	Ala	Leu	Met				
	210					215					220								
Leu	Leu	Glu	His	Gly	Thr	Asp	Pro	Asn	Ile	Pro	Asp	Glu	Tyr	Gly	Asn				
225					230					235					240				
Thr	Ala	Leu	His	Tyr	Ala	Ile	Tyr	Asn	Glu	Asp	Lys	Leu	Met	Ala	Lys				
				245					250					255					
Ala	Leu	Leu	Leu	Tyr	Gly	Ala	Asp	Ile	Glu	Ser	Lys	Asn	Lys	His	Gly				
			260					265					270						
Leu	Thr	Pro	Leu	Leu	Leu	Gly	Val	His	Glu	Gln	Lys	Gln	Gln	Val	Val				
		275					280					285							
Lys	Phe	Leu	Ile	Lys	Lys	Lys	Ala	Asn	Leu	Asn	Ala	Leu	Asp	Arg	Tyr				
	290					295					300								
Gly	Arg	Thr	Ala	Leu	Ile	Leu	Ala	Val	Cys	Cys	Gly	Ser	Ala	Ser	Ile				
305					310					315					320				
Val	Ser	Leu	Leu	Leu	Glu	Gln	Asn	Ile	Asp	Val	Ser	Ser	Gln	Asp	Leu				
				325					330					335					
Ser	Gly	Gln	Thr	Ala	Arg	Glu	Tyr	Ala	Val	Ser	Ser	His	His	Asn	Val				
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Ile	Cys	Gln	Leu	Leu	Ser	Asp	Tyr	Lys	Glu	Lys	Gln	Met	Leu	Lys	Val				
		355					360					365							
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370

375

380

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